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# AMERICAN DRUGGIST

∴ AND ∴

# PHARMACEUTICAL RECORD.

A WEEKLY ILLUSTRATED

∴ Journal of Practical Pharmacy. ∴

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A. R. ELLIOTT, President.

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## A CONFIDENTIAL TALK.

WITH this issue the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD presents itself to its readers in a new dress and with some change in its mechanical makeup.

The generous support given us by our readers is fully appreciated by us, and with a view to showing our appreciation we have made this change so as to give them a very much larger amount of reading matter without any additional cost to them. The expense involved in making this change is great, but this expense we cheerfully bear as our past experience has demonstrated that any expense of time, thought or money that we may make in our efforts to improve the journal will meet with prompt and hearty appreciation from the drug trade.

The evidence of hundreds of readers all over the country shows that this paper has been of great value to them. It depends largely upon each individual reader whether or not he derives the greatest possible amount of benefit from it. The way to do this is, in the first place, to read the paper. In the second, to utilize the information gained therefrom, and last, though it might possibly be placed first, let us know what you think of it, and to offer suggestions as to how we can make it more valuable to you.

We wish to hear from all of you and will heartily welcome your suggestions, answer your queries, and aid you in every way that lies within the compass of a first class journal.

KEASBEY & MATTISON  
FALSELY ACCUSED.

THE first duty of a political organ is to make capital for the party. Considerations of accuracy, honesty or truth in the news matter published are all of but little moment when compared with the party welfare, and everything must be subordinated to that end.

Unfortunately the distortions and misstatements which sometimes pass for news are not infrequently calculated to do great harm, and to do this furthermore in such a manner as to leave little hope of adequate redress for the injury received.

A striking illustration of this is shown in the following paragraph, which has gone the rounds of the daily press:

"PHILADELPHIA, Dec. 27.—The Keasbey & Mattison Company, of Ambler, near here, to-day posted a notice demanding the resignation of such of their employees as are Democrats or favor the Wilson Tariff bill. The company says it is only fair that its work be done by men who did not contribute by their voices and votes to the present deplorable condition of affairs. The superintendent has been instructed to employ no more Democrats when it is possible to secure Republicans to do the work.

"The action of the company has caused great indignation among the Democrats of the vicinity.

"The Keasbey & Mattison Company is a corporation with a capital of \$2,000,000. The majority of the stock is held by Dr. R. V. Mattison and Henry G. Keasbey. Mr. Keasbey is now in Europe. The chief product of the company is pipe covering. It is said its profits have been very large the past few years.

"More than twenty-five men have already been dismissed, the most of them Democrats."

In regard to the report in question, Messrs. Keasbey & Mattison express themselves to us as follows:

"No man has ever been dismissed from the service of our company on account of his politics.

"Of the men laid off on account of the depression in business, instead of being 'mostly Democrats' more than three-fourths of them were Republicans, and it

seems to us if there is any 'great indignation' to be aroused in this vicinity on account of this matter it should be by the Republicans instead of the Democrats. As a matter of fact there is no 'indignation' that we know of, as the men understand perfectly well that they are laid off on account of lack of orders, and that the fact of these orders not being received is due to the exploitation in Congress of the proposed 'bill to regulate the tariff,' which causes many manufacturers to withhold orders at present for even necessary repairs, not to speak of new work for the further extension of their business.

Both the New York World and the Philadelphia Record went into hysterics over the wholesale discharge of the Democrats in our employ. Had either journal cared to examine into the facts they never would have published the 'news,' as they would have found that of the men discharged but three were Democrats (two of whom have re-entered the company's employ), all the rest voting regularly the Republican ticket, and that no other employees, either Democratic or Republican, have since been dismissed from our works."

It affords us pleasure to set the Keasbey & Mattison Company right before the drug trade in this matter, and we trust that this step will prevent them from suffering unjustly in the eyes of the trade for this canard. Our readers should profit by this example and hesitate to condemn upon the mere report of an often irresponsible partisan press.

HONORARY membership in the British pharmaceutical conference has been conferred upon "Joseph P. Remington, Ph.M., F.C.S., Professor of Theory and Practice of Pharmacy in the Philadelphia College of Pharmacy, First Vice-Chairman of the Committee of Revision and Publication of the Pharmacopoeia of the United States of America; and Herr Dr. Anton von Waldheim, President of the Gremium of Pharmacists of Vienna, Vice-President of the Austrian Pharmaceutical Society, Chairman of the International Pharmacopoeia Commission of Vienna."

THE Convention of the Interstate League, to be held in this city on February 6, should be made a success. Every one of our readers can and should do something to making it one.

Written for the American Druggist and Pharmaceutical Record.

## SHALL NOT "TEACHING COLLEGES" TEACH?

BY SEWARD W. WILLIAMS, PH.C., F.C.S.  
East Orange, N. J.

My attention was very much arrested by the following quotation credited to Mr. W. B. Thompson, in THE DRUGGIST AND RECORD of December 28:

"I would abolish all working laboratories for pharmaceutical practice now existent in colleges and teaching institutions."

If "teaching colleges" are not to teach practical pharmacy, how much greater are the advantages they offer than those afforded by systematic courses of instruction sent by mail, good text books, and the certificate of a board of pharmacy? Mr. Thompson makes it clear in his article on page 276 that he favors the shop as the place where a practical knowledge of pharmaceutical science is to be attained.

Is it necessary or desirable that a man be obliged to gain all his practical experience by practicing at once on the dear public? This is not the case in other professions having to do with the life and health of the community—surgery and dentistry for example.

As target practice makes one accurate and familiar with the use of fire arms, so laboratory experience may make one accurate and familiar with the handling of poisons.

Prescriptions compounded under the supervision of a competent instructor who has nothing to call him away at the important time may as safely be supplied to the hospitals of a great State university as medicines, put up in the drug store under the supervision of the oft-interrupted pharmacist, can be given to the public. This is granting that in the average drug stores throughout the country prescriptions are never compounded by the unlicensed clerk when the "competent pharmacist" is out or otherwise engaged. From my own observation this is granting a great deal.

If the shop is to do the all-important work, what more is necessary than the board of pharmacy? The college in granting diplomas is presumably to believe what it is told and graduate students accordingly. This fortunately works pretty well, because pharmacy students and their employers are honest. But the practice is unbusinesslike nevertheless. An institution, which takes the business-like stand of knowing without being told the practical experience of its candidates for graduation, by insisting that such experience be attained within its own walls, is not recognized as a "teaching college." It doesn't ask that some one else do its teaching so it is not a "teaching college!"

The "teaching colleges" however are fast introducing perfected laboratory courses resembling very closely, as their more limited time will admit, the courses of the other institutions. Many of them are now affording the most practical kind of instruction in magnificent chemical laboratories of their own, under the management of eminent pharmacists and chemists. To hear any one cry halt in this rapid march of progress toward institutions independent and complete in themselves surprises some of us at least.

The commercial side of pharmacy has assumed proportions of late years which, in the writer's opinion, quite seriously embarrass the drug store as a school of purely pharmaceutical science. In fact it would seem as important for the drug clerk nowadays to be competent to judge the products of others as to be able to

make them himself. His college laboratory experience surely comes in here ahead of usual shop experience.

Professor Oldberg, on pages 349-350, treats the question of pharmaceutical education like the expert analyst which he is. With him the wish is neither "father to the thought" nor parent of his deductions. He is not influenced in his analysis by what he wants to find, but with scientific accuracy isolates the alkaloid of truth and tell us just what and how much he finds.

For my own part, I would not question how or where a man acquired his education and experience so long as he could demonstrate conclusively that he had them. But I believe that laboratory courses may be so perfected and examinations made so practical that colleges of pharmacy may take young men of good general education and graduate them as trustworthy dispensers of medicine without regard to outside help.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its user, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**To Plate Copper with Tin.** C. D. L., Galesburg, Ill.—For depositing tin by simple immersion a saturated solution of cream of tartar is made with boiling water; in this solution small brass or copper articles, such as brass pins, for example, are placed between sheets of grain tin, and the liquid is boiled until the desired result is obtained—a beautiful white coating of tin upon the brass or copper surfaces. Ordinary brass pins are coated in this way. A little chloride of tin may be added to the bath to facilitate the whitening. The articles are afterward washed in clean water and brightened by being shaken in a leathern bag with bran.

**To Destroy Croton Bugs.** W. R., Brooklyn.—Prof. Riley, entomologist of the Department of Agriculture at Washington, says:

"The main difficulty in ridding houses of the common croton bug or German cockroach (*Phyllodromia germanica*), is due to the fact that people do not seem to be willing to take enough trouble. They wish something which they can scatter about once and be relieved for all time, but, unfortunately, there is nothing which will accomplish the result in this easy way. There is nothing better in my experience than to thoroughly and persistently use California buhach, a home-grown pyrethrum powder. This should be puffed from a small bellows into all cracks or holes and crevices in the infested room just after nightfall and the room should then be closed and left until the following morning. In the morning the servant should go over the room with a broom and sweep up every specimen found upon the floor and burn them. This process should be repeated for two or three nights in succession, and at the end of that time the trouble will be mainly past. The insects breed rapidly and migrate from one house to another, so that the operation will probably have to be repeated again after some months."

**Duration of Protection from Vaccination.** R. G., Newark, N. J.—It is generally considered unsafe to depend upon vaccination for more than seven years.

## Miscellaneous Formulas.

### FOR DRY RHINITIS.

[BROWN.—Med. Record.]

Oil of eucalyptus.....gtt. xx. to 3 j  
Vaseline or lanoline.....3 j

Apply to mucous membrane.

### FOR HEMORRHOIDS.

[Med. Record.]

Cocaine.....gram. 1.50  
Morphine.....centig. 30  
Atropine....." 30  
Tannin.....gram. 1.50  
Vaseline....." 30

Apply after each passage.

### FOR ECZEMA OF THE SCROTUM.

[CAMPBELL.—Med. Record.]

Iodoform.....3 ii j  
Zinc oxid.....3 jss  
Spirit camphor.....3 ii j  
Aque calca, { .....aa 3 jss  
Olei liac, {

Apply locally at night, and have patient wear suspensory bandage.

### POWDER FOR ECZEMA.

[Med. Record.]

Salol.....5 gram.  
Acid boric.....3 gram.  
Acid salicylic.....0.50 centig.  
Acid thymic.....0.50 centig.  
Talcum powder.....8 gram.

Irrigate with carbolized water, and then insufflate with the powder.

### SWEATING FEET.

[BROCK.—Med. Record.]

Naphthol.....5 parts  
Glycerin.....10 parts  
Alcohol.....100 parts

Apply locally twice a day, after which a powder composed of two parts of naphthol and 180 of starch is placed between the toes.

### FOR CROUP.

[BETZ.—Med. Record.]

Ether.....4 gram.  
Ether acetic.....2 gram.  
Menthol.....0.60 centig.

In desperate cases give as inhalation every fifteen to twenty minutes.

### FOR DIPHTHERIA.

[SMITH.—Med. Record.]

Squibb's peroxide of hydrogen.....3 ij  
Sodii bicarbon.....grains 2  
Aque destil.....3 ij

One teaspoonful of each to be mixed in the bottle of the hand atomizer immediately before its use. Spray the fauces every hour. The nostrils may be sprayed with the same, with the addition, perhaps, of two teaspoonfuls of water.

### GODDARD'S GARGLE.

Alumina.....3 ij  
Cort. granat.....3 ss  
Pet. rose rub.....3 j  
Mellis.....3 j  
Aque bull.....3 vj

The mixture can be used without dilution, or with an equal quantity of water.

### TINCTURE OF INDIAN BARK CARMINATIVE.

[Chemist and Druggist.]

Tr. card. co.....3 j  
Tr. capsic.....3 ij  
Tr. rhel.....3 j  
Tr. myrrhæ.....Mxliv  
Sp. æth. nitr. (850).....3 v  
Golden syrup (colored with sacch. ust. q. s. and thinned in aqua 3 v) ad.....3 xxxij

Dose.—One-half to one ounce for slight bowel complaints.

### LIQUID ROUGE.

[Chemist and Druggist.]

Carmine.....3 j  
Solution of ammonia.....3 ss  
Glycerin.....3 ii j  
Essence of white rose.....3 j  
Water to.....3 iv

Rub up the carmine with the ammonia and glycerin, add an ounce of water, and heat to drive off traces of ammonia. When cold add the essence, making up to four ounces, and filter.

### TREE ST. GERMAIN.

Elder flowers.....15 parts  
Fennel seeds.....8 parts  
Aniseed.....5 parts  
Cream of tartar.....5 parts  
Senna leaves.....24 parts

Macerate the senna in alcohol for twenty-four hours and let the spirit evaporate without heat. Then mix all the substances and divide into packets of two drachms each. Each packet is sufficient for a cupful of infusion.

## FABRY BALL.

[Veterinary Counter Practice.]

Pulv. opii.....	3 ss
Pulv. cupri acet.....	3 j
Pulv. potass. nit.....	3 j
Pulv. antim. nig.....	3 j
Ferri sulph.....	3 j
Pulv. gran. parad.....	3 j
Pulv. guaiaci.....	3 j
Ol. palmæ q. s. ut ft. bol. j. omni nocte.	

To be given for two or three weeks at a time, and discontinued as the symptoms abate.

## CORRESPONDENCE.

## The Formula Question Again.

To the Editor AMERICAN DRUGGIST:

My attention has been called to an article which appeared in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD of December 21 by Mr. Ferd. Lascar criticising a recent article of mine, and in reply to that criticism I would like to mention that different people have different ideas, and if the formulas submitted did not suit him they did suit other people, but, as was stated in the article in controversy, they were merely types for the druggist to follow if he cared to.

A druggist has a right, if he cares, to publish his formula on the label and the same right to leave it off. He also has the privilege to attach any title he pleases, no matter what; it is a question which concerns himself and no others, and of which he alone is the judge for the right or wrong.

I do not think I make a mistake if I say that the average druggist of to-day is competent to judge his own preparations.

In the chlorodyne or pulmonic syrup the idea was to furnish a formula for a preparation containing just those ingredients which seem to trouble Mr. Lascar, and the name suggested itself from the fact of some of the ingredients having entered into one of the oldest preparations on the market to-day. Surely there are other people who use chlorodyne itself than who take it on a physician's prescription. The dose of the syrup was not given and there is no more reason to suppose the dose to be a tablespoonful than there was that it was to be a bottle full.

When druggists make their preparations they figure out a safe dose, and they will probably have done so in this case. Surely if a teaspoonful contains less than three minims of tincture of cannabis indica and extremely small doses of the other ingredients, there cannot be much danger of chronic use of it.

If Mr. Lascar will take the trouble to reread the article he will not find any claims to originality for the linseed cough mixture. As was stated before it was merely offered as a typical formula. If he has objections to the hydrocyanic acid he must have objections to the syrup wild cherry of the pharmacopœia, which is not infrequently given to babies, while farther on he seemingly endorses it.

Mr. Lascar surely cannot be very well read on the cod liver oil subject, for gaduol does contain more than one of the active constituents. If we take the word of the makers, as well as that of the scientists who have experimented with it, it contains at least five; so there does not seem to be any reason to say it is not true to its name. It is at least as efficacious and does not produce those unpleasant symptoms which often occur in some people due to idiosyncrasy.

The wine of coca formula was not given from a temperance standpoint; it was given as a suggestion to those who desired something a little different from that which they already had.

In conclusion I would say that, while I am always willing to have my formulas criticised, I would say that the criticism does not come in good form from any one who sends a lot of family receipts to a drug journal, over his own name, as something new.

ELBERT E. FISHER.

Bridgeport, Conn., December 28, 1903.

## A Visit to the Vanilla Country.\*

BY CHARLES E. HIRES.

Leaving the city of Mexico I proceeded to Pueblo, then to Jalapa, and on to Vera Cruz, taking the Ward's line of steamers up the coast to Tuxpan, where I arrived after a thirty hours' sail. Here a tug came to the mouth of the Tuxpan River and took me off, steaming up the river nine miles to the city of Tuxpan. The city has 10,000 inhabitants, and is composed principally of one-story, limestone thatched houses. After spending three or four days getting my outfit together, consisting of four mustangs, servants, guide and interpreter, we started early on Monday morning for the vanilla land.

Hastening on, we rode through a dense forest by a bridle path, where we had to go single file, which brought us to an Indian village on the Casonies River, after some thirty miles of hard riding, besides having to ford several rivers. I would state here that the sun is intensely hot at midday, so that the most of the people retire from about 11 to 2 o'clock. We stopped about 11 o'clock at a small village composed of bamboo and thatched houses, where we waited until four o'clock before proceeding on our journey, arriving at Casonies in the evening at about twilight. On the Casonies River we saw hundreds of Indian canoes plying up and down this stream with both men and women propelling them, which was a curious sight. We started early next morning for Papantla, where we arrived at about nine o'clock at night. This is some thirty-five miles further inland. It is a city of about 12,000 inhabitants, and is composed mostly of one-story, limestone, thatched houses. This is the metropolis of the vanilla growing district, situated in a valley surrounded by high mountains on all sides. This is the county seat. Court was in session when we arrived there, and it was impossible to get accommodations at the one hotel or any of the boarding houses. The hotel is a one-story building, composed of three or four rooms; these were all turned into sleeping rooms at night, and everybody had to sleep together—men and women—cots were arranged side by side, until there was scarcely room to get around. As the climate here is always warm, eating is done mostly out of doors. By the courtesy extended to me through letters of introduction I had I was taken and well cared for by Mr. Tremari, who is one of the first citizens and the largest curer and shipper of vanillas in Papantla.

When the Spaniards discovered America the custom among the Aztecs of flavoring chocolate with vanilla was already in vogue. The former borrowed the practice from the latter and transmitted it in turn to the other nations of

\*Read before the Philadelphia College of Pharmacy.

Europe. A few years later this valuable product became an export article, and it is believed that the first vanilla bean introduced into Spain came from the State of Oaxaca. It is raised in diverse parts of the continent, in the island of Cuba and other Antilles, and in some portions of Africa and Asia as well, and as a rule wherever there is heat and moisture, and shade, provided the lowest temperature in Winter be not lower than 65° F.

At first that which grew wild in the woods was harvested, and the inference is clear that, in proportion to its gradual diminution and increasing consumption, it was found necessary to foster its growth and in this the State of Vera Cruz took the initiative, being the first place known in which the plant was under cultivation in America. Notwithstanding numerous inquiries made by me, I have found it well-nigh impossible, even with the aid of tradition, to ascertain the exact time in which the cultivation began; this alone being known, that the period is a remote one. From some of the old archives of Papantla we derive the information that in the year 1760 there were already in existence vanilla forests under cultivation. The State of Vera Cruz has had and to-day possesses great natural advantages for the production of vanilla. But it is cultivated only in the cantons of Misantla and Papantla. For a number of years Mexico supplied the markets of the world with this product, but of late years the islands of Bourbon and Java have come in competition with European markets to a marked degree.

With this brief history of the origin and nature of vanilla start out with me on a bright clear morning in the month of February, with the thermometer ranging from 85° to 100°; dressed in thin linen, with a light Panama hat, and mounted upon a mustang for our first visit to the vanilla fields, located about nine miles from Papantla. The first error that you need to correct is our northern conceptions of a field. It is not here the carefully tilled, snugly fenced, and finely cultivated tract of land that characterizes the marketable products of New Jersey or Pennsylvania, but a wild, boundless, dense and almost impenetrable forest, with undergrowth so dense and rank that our mustangs must be abandoned at a by-path, and we ourselves compelled to stoop almost to a creeping posture to penetrate it. Look at yonder tree—a Mexican cedar—20 feet in height, covered with dark green luxuriant verdure, with a small tapering trunk a few feet in circumference, and clinging to and apparently growing out of its bark observe that strange looking, clinging vine, in circumference a little larger than an ordinary lead pencil, shooting up into the tree, covering its branches, and running from it into the adjoining trees, and often forming festoons and arbors so dense and thick as to exclude the rays of the sun at noon day. Covered with a dark green and spear-shaped leaf and hanging pendent from its interlacing branches, are green pods from four to ten inches long and you have a picture of a vanilla vine as I first saw it in its native soil and in its highest state of cultivation. Tree after tree in this vast forest is covered with those luxuriant vines, peeping from which, in all the glory of luxuriance, are countless hundreds of the long, luscious, tapering vanilla bean; in circumference almost equal to a banana and from two to three inches longer. Some of a dark green and others of a bright yellow, and sometimes where they grow most luxuriously resembling bunches of bananas, apparently growing

upon the native trees of the forests. The remoteness from civilization, the total absence of everything indicating care or cultivation, and the strange juxtaposition of this wealth of ripened fruit to the wild and unbounded woods, made the scene one of the most strange and marvelous upon which the eye ever rested. Vast areas containing hundreds of square miles of contiguous territory in this province are devoted to the growth of this plant; wherever you look and wherever you travel you are confronted with this overhanging vegetation. You behold the primeval forest utilized by the half civilized natives as a natural garden for the growth of this delicious, aromatic plant.

The cultivation of the plant consists of cutting away the forests to give it room to grow. The vines are naturally grown from cuttings, the same as grape vines, but they are also grown direct from the seeds, and in such cases the fruit is much later than when the vines are planted. The vine is very nardy in its native element, and sometimes takes root even if thrown carelessly on the ground, providing it has shade and moisture. Four or five years after the vine is planted, and sometimes before that period, its base rots at some distance, and before this occurs rootlets from above that portion which is dying have already grown and descended along the tree to get nourishment from the earth. This circumstance, added to the fact that if a reed be severed some distance from the ground it does not die, has given rise to two distinct theories respecting this plant which I desire here to take the opportunity of correcting; the first theory, which has the support of many reputable scientists, is that the plant is epiphyte, deriving its sustenance from the atmosphere, and being independent of the soil, and the second that it is a parasite and derives its nourishment chiefly from the trees to which it clings. A careful examination of the plant in its natural forests and a patient study of its habits and characteristics have convinced me that both of these theories are founded in error, although, before my visit to Mexico, I confess I had been led to adopt the parasitic theory, upon information from many intelligent growers.

Mr. Fuenti told me he had made the experiment of severing the reed two or three feet from the ground, and in a few days later two or more tendrils had sprung from the lower end of the vine and gone directly to the earth, thus replacing the lost base. The reed is very juicy, and when deprived of its roots tries to replace them, complying with the laws of its own existence; but this is done at its own expense, taking nothing from the tree, which statement is proved by the fact that if it consumes too much time in its endeavor to reach the soil it withers. Should the tendrils reach the soil before the reed is entirely dried up the latter recovers later; but if, on the contrary, its strength is not sufficient to accomplish the task of reaching the earth, it gradually withers until it dies. In spite of the facility with which the reed takes root and replaces its base, some die, either because the reed was not fresh and sound, or because it was damaged, or by reason of its being in localities where it received too much sun or too much shade.

I found others familiar with the vanilla growth contending that the plant depended for its nourishment and growth upon the sap of a particular tree—the *cojondigate*—and in support of this theory I was taken to the forest and shown vines growing luxuriantly around the base of this

tree, showing great fertility and productiveness, and a high state of health. But upon examination of the facts I found that this tree would grow only upon certain soil, and under certain conditions, where the soil was almost moist, and the reason that the vanilla grew so much better on this than on any other was because the conditions that so well suited the tree were the very conditions that best suited the vanilla plant, and, when speaking of my observations in this direction, they admitted that it might be possible, and when finding, in one of the gardens of Papantla, a vine growing upon a dead tree, they could not but confess that it was perhaps not a parasite. These good people had proven to me, or assured me in their correspondence, that the plant was a parasite, and it gives me pleasure to correct the error I was then laboring under. After making diligent inquiry about the plant, I had the pleasure of meeting Agopito Fontecilla, who, I soon learned, was an intelligent man, and who had made a scientific study of the plant, and to whom I am indebted for the greater part of my knowledge of the plant.

Taking the average of the last ten years the number of beans that has been gathered each crop has been about 15,000,000, with the exception of a small quantity gathered on the southern coast of Vera Cruz, some 100,000. The remainder comes from the cantons of Papantla and Misantla, mostly from Papantla. The prices which it has attained during that time have varied much, ranging from \$22 to \$125 a thousand. According to the data in my possession it averages \$60 to \$70, and produces over \$1,000,000. The smallest unripe vanilla weighs 20 pounds to the thousand, and the largest 65 pounds to the thousand, and the average about 45 to 40 pounds. The average loss of weight in curing is about 9 pounds to the thousand. The length of the bean varies as much as its weight, measuring from  $4\frac{1}{2}$  to 10 inches, the greater part ranging from 7 to  $8\frac{1}{4}$  inches. The plant (*vanilla planifolia*) grows a few yards in length each year, some portions of it clinging to the tree which supports it, and some remaining loose and hanging wave-like. Its thickness is about  $\frac{3}{8}$  to  $\frac{1}{2}$  inch. It is very juicy, round, and of a green color, knotty at intervals, leaves alternate, shaped like a spear, and plump. The flower is yellow, and has a sweet, agreeable smell. The plant grows in length only. It does not grow anything like a grape vine; it only bears fruit upon the new portion that grows each year. The thickness of the vanilla bean decreases gradually from two-thirds of the lower portion to the tip. Its shape is almost round, somewhat flattened on one side, curving up to the neck, which generally terminates in an arc. Its circumference varies, measuring when green from two to three inches, although the greater part measures three-fourths inch in diameter. It has a thin, smooth cuticle, with two superficial lines on either side. When thoroughly ripe its color varies from dark green to light yellow. Its lower portion is filled with small seeds, and after being treated its thickness is reduced to one-fourth of its original size. It remains black, oily, and has an agreeable perfume.

Around Misantla there are often several varieties, these are known as Misantla bean, having thick skins. They are not packed as well, and are not considered as valuable as the Papantla curing. These varieties are designated by the natives as *cimarrona*, *mestiza*, *manza*. When cured only an expert can tell the different goods. The wild or pompoma bean, Segne Xante,

or sometimes called banana vanilla by the Totonaca Indians who eat them, is to be found here. This plant differs from that of the *vanilla planifolia* in that it is much smaller with larger leaves and less pointed. The bean is about twice as thick and of a triangular shape, somewhat resembling the ordinary banana when insufficiently nourished. It has an agreeable fragrance, resembling that of the anise plant. It is commonly and naturally supposed that the beans grow and thicken until approaching ripeness. It is not so, for after it is two months and a half old it ceases to increase in size. Mr. Tremari said he had made several observations during the past two years, measuring vanilla from different vines, and has found that some after the middle and some after the last half of June have neither grown nor thickened in the least.

The vine puts forth many blossoms, but the greater part do not bear, and those attaining full growth fall, or turn yellow and crack prematurely, owing to some disease in the reed; the bean, however, clings to it. This serves as a pretext for some persons to say that in October and November the vanilla bean is ripe and should be cut, not bearing in mind that its apparent ripeness arrives from sickness in the plant, as shown by its defective nutrition, being soft to the touch and lacking the solidity of the ripe bean.

I found that the plants grew best in virgin soil where streams and brooks abound, and where the earth is a little sandy, and the dampness is retained longer than in any other soil; in these places the vines grow luxuriantly and vigorously, and yield large fruit, a most important factor when one considers how scarce rain is in this section between February and July. Marshy ground is likewise undesirable, as an excess of moisture rots the vine. It is found that plants do best where a little sunlight can reach them, and the largest growers have trimmed out the heavy foliage that covers many plants. Yet vines exposed too much to the sun yield little vanilla, and what they do yield is small; the plants soon get yellow and die in a few years. On the other hand, those with heavy foliage never thicken. Their color remains a rich green, and finally sickens. The bean they yield is likewise small, badly nourished, and ripeness is retarded. After setting out the vines, if they do well, they will commence to bear fruit in about three or four years; its yield increases for four or five years, when it begins to decrease. It bears little vanilla after the tenth year. These vines yield when fully developed 85, and some as high as 200, although these are very rare. Some vines have branches that bear as much as 12 to 15 beans.

The proper time for the Mexican vanilla bean to ripen is in January or February, but such a demand is made for the bean that for several years the growers begin to gather the crop in October and November, so that the harvest is over before the time it should have commenced, and this vanilla weighs one pound less to the thousand, and remains red and subject to changes. Vanilla, if allowed to ripen naturally, remains black, juicy, and of a silvery hue shortly after its curing, and for many years it can be preserved unchanged, but if cut prematurely it is affected much, as any other fruit naturally is when picked two or three months before the time, and it never looks as it should when this is done. In order to impart to the bean all the good properties of which it is susceptible it should be cut as it becomes yellow, for, if it be cut all at once, even though it be in the month of



January (as was the practice some years ago), the result will be that a great portion of it will remain unripe, because, as it blooms in March, April or May, this same gradual change continues, everything being equal, until it ripens. There is, besides, another cause which brings about the same difference even in the case where they blossom together, and that is the greater or less shade afforded by the trees on which the vines grow. In former times, in compliance with an order from the government, the sub-delegates, and after them the civil authorities, were instructed to see that the unripe fruit should not be cut. When this duty fell to the lot of conscientious and active persons abuses were in a great measure avoided, but complete satisfactory results were far from being attained on account of the scarcity of the necessary means to watch and pursue smugglers. At other times the office was applied for by indolent persons, who regarded the orders of the government with indifference, and thus the law soon fell into disrepute and was finally abolished by the government. The difference between the price of the vanilla picked during October and November and that picked after January is in the proportion of three to nine. Those acquainted with this fact, seeing those beans sell for the third what they know by their yearly experience could be sold for nine because they do not want to wait two or three additional months, might think them foolish, or would imagine that poverty compelled them to suffer this loss; but it is neither the one thing nor the other, because these people are clear headed and their prosperity so general that it may be said there are no people in the world who live in greater ease than do these people of Papantla, and this is not alone due to the fertility of the soil and the good quality of the products which are obtained by cultivation, but also because in their forests important products grow wild, which are the property of any one willing to gather them. The motives actuating these people in selling the vanilla before it is ripe are caused by avarice on the one hand and rascality on the other. The first vanilla sold has, as a rule, been stolen, and as it is cheap, though of poor quality, it is always a bargain for the buyer. The planters who have vanilla beans somewhat distant from their homes, as soon as they know of any purchase or sale, cut their own beans, fearful lest the same be stolen, as they know by experience that, immediately upon the start of such traffic, complaints are heard from the unfortunates, who in a short time are deprived of the results of hard labor and care. This abnormal condition of affairs goes on, and thefts repeatedly occur even in the best guarded vanilla forests, whose owners cannot constantly oversee by day and by night, as other duties require their attention. For this reason they decide to cut and sell the vanilla bean at very low figures rather than to suffer total loss. For no other reason is the fruit gathered and sold before it is thoroughly ripe. This unseasonable traffic both immoral and highly prejudicial to the property interests of these cantons, should be checked by proper legislation; in this way the crop and the quality of the goods would be much greater, and its superior and delicate flavor that justly belongs to the best Mexican vanilla bean would make it esteemed above any other aroma in the world.

In curing vanilla it is an easy matter to impair it either by an excess or lack of dryness. Perfect curing is only attained

when the bean is left in such a condition that it remains juicy and retains its greatest possible weight, a consummation which the expert should constantly aim at. If the vanilla is cut when ripe, success will be easy, but when cut prematurely, as has been the case during many years, art has to replace nature as far as possible, which can be done only through labor and substantial knowledge of the subject, so that some idea may be formed of the delicate care needed for this operation. Suffice it to say that even the best known experts sometimes permit the vanilla to dry too much, or else the greater part of it, not to say all, becomes filled with insects, either before or after the process of curing. It is only necessary to allow it to remain in the sun three or four minutes more or less than is required to bring about one or the other of these results. Great care and fine eyesight are required in the separation of the diseased from the sound, because, if only one remains undetected, it will mold and endanger other bundles in a short time. The curers in Papantla excel in curing and bunching the bundles, and in the regularity and evenness with which they classify the size and quality. As a rule planters do not know how to prepare the beans, so they sell them in an unripe state to curers who yearly employ experts for that purpose. The beans are brought in by the natives in large and small lots, very similar to the way in which our country people bring in rags, butter and eggs to the town storekeeper. The beans are first put in a sweat box, where they are sweated about 36 hours. They are then placed on mats in the sun if the day is bright and clear, if not, they are placed in a large oven to dry. This requires the utmost care and attention, else the beans are easily spoiled. After the excess of moisture is dried out, they are again sweated. This operation is repeated until they are black. They are then placed in the sun in the middle of the day only from eleven to one; they are then put in racks in vanilla rooms, one above the other. While the curing is going on it is necessary to separate them with the utmost care; the discolored from the black bundles, the very small, the impoverished, those with skin woody at intervals, the ones with a tough, thick and smooth skin, and also the spotted, cracked or split bean, assorting them in their respective classes. The great care to be exercised in curing vanilla can be appreciated by what I have said before; but it is not amiss to observe that however little it is overdried it is sufficient to reduce the weight almost one pound to the thousand, which would be a great loss, besides, the bean that is overdried loses some of its color and depreciates its value one or two dollars a pound which amounts to as much as the loss in weight. When the vanilla is thoroughly ripe it is easier to ascertain the required point of curing, and besides gives less trouble and is not so exposed to changes. It gets silvery white, being cured and in a few months it is crystallized and will be preserved in this way for a number of years. If cut when unripe just the opposite happens, for not only are few crystallized but their keeping quality is poor. After the beans are thoroughly cured, which takes from three to four months they are assorted in different sizes and bundled in bundles containing from 50 to 75 beans each. The different curers having different amounts for their packing. Some 50, some 60, others 70 and some 75 to their bundles. These bundles are all uniform in size according to length, and are placed in cans of 40 bundles each;

then four or five of these cans of different sizes are packed in a case made of Mexican red cedar, which is the most plentiful wood grown here. A curer stated to me that the making of these cases was the most expensive part in putting the bean up. As they have no machinery, such as saw mills and planing mills, everything must be done by hand, which necessarily takes some time to make one of these cases, as the corners of each are grooved and dovetailed together, making the case cost, when completed, from \$2 to \$3.

After the beans are cased the cases are then covered with a fiber matting made here by the Mexicans and the beans are ready for shipment. Mules or burros, in some cases mustangs, are drawn up in line and two cases are strapped on the back of each animal, and started for the sea coast in caravans of perhaps eight or ten animals with two or three attendants, then shipped on steamers for Europe and the United States.

In going from the interior of Mexico you will meet caravans of these beasts of burden laden with all kinds of merchandise, this being the only way of transportation. The authorities for some time have been endeavoring to get a railroad to Papantla, but as yet have been unsuccessful. The Aztecs or native Indians do not want to have any improvements. Several attempts have been made to survey a road, and just before reaching there I was advised of a civil engineer who had been sent to survey a route and who was next day after his arrival found hanging to one of the trees outside of the town. The natives do not want anything different from what they have been used to, and will sacrifice their lives in defense of what they consider their rights.

I returned to America with a conviction that, notwithstanding our national character of penetrating to the utmost corners of the earth, that, as a people, we know little or nothing of Mexico—a great, broad, rich, fertile tract of land, magnificently endowed by nature, and so favorably located, as respects soil, climate and physical conditions, that, in my judgment, it is ere long to become the most prolific source of supplies for many of the essential and valuable products needed by the world, and of her varied and valuable industries none are more promising and give indications of more important growth than does the vanilla bean. The infusion of greater intelligence in the minds of the natives engaged in its development, the employment of better means for its preservation and cultivation, the opening of newer and larger districts for its supply, and a more intimate and scientific knowledge of its natural requisites, would, in a few years, multiply manifold the volume of this commerce, and would permit it to be placed upon our markets and markets of the world in a far better condition, as respects quality, and at a price that would largely stimulate its use.

#### Southern Siftings.

Dr. Edmund Bocking, of Wheeling, and Miss Mary E. Wilson were recently married.

Burglars entered the drug store of Reid & Co., Savannah, Ga., recently and stole about \$300 worth of goods.

The Lankford Chemical Company, of Galveston, Texas, with a capital stock of \$10,000 has been chartered.

Messrs Witworth Brothers' drug store, Baltimore, Md., was burglarized recently of a quantity of tobacco, cigars, etc.

## News and Notes.

### Boston Budget.

One of our daily papers has been serving its readers with courses on the Campion and Detroit plans, "cut rates," "black and white lists," and the like. We have but to look to the recent visit to this city of President Frank A. Faxon, of the Wholesale Druggists' Association, and who was accompanied by ex-President James E. Davis, to ascertain the cause of these articles being published.

The "cutters" and those acting in their interest immediately pounced upon the visit of these gentlemen as an indication that the latter were acting in their official capacities, and were here for the purpose of ascertaining the opinion of several large manufacturers in this vicinity in regard to the plans of the wholesale association.

This series of articles has been characterized as misleading, and justly so. One of the statements was to the effect that at a recent meeting of the Interstate League of this city the members in attendance complained because an assessment (the second in that month, according to the article in question) had been ordered. This is untrue, because no meeting of the members of the Interstate League has been held for months, the business of the body being transacted by its officers and committee.

These articles are highly colored in the interest of the "cutter," and the dear public is given to understand that sarsaparilla can be obtained for almost if not quite nothing should the Detroit plan be adopted.

William W. Bartlet, Ph.G., still retains his Shawmut avenue store.

"Washington Street Drug Store, State Registry and City License" is one of the signs seen on this important thoroughfare.

John D. Proctor, Ph.G., formerly of Langhill & Proctor, is now head clerk in the "Nagle Drug Store," 236½ Bunker Hill street.

A significant sign of the existing hard times is seen in the great dearth of new stores. This is not only true of Boston but of New England.

The committee on annual dinner for the Boston Druggists' Association is composed of President F. A. Davidson, Dr. T. L. Jenks, Thomas Doliber, Ph.G., Amos K. Tilden and Secretary Jordan.

It is a fact not generally known that John H. Daune, who for a long term of years has served the city as street commissioner, and who has just received a re-election to that important office, commenced his business career in a drug store.

The establishment of a new drug store at the present time is a rarity, a great contrast from former times. Another indication of the present depression is seen in the few business changes—sales of stores—and in the difficulty experienced by dealers who wish to sell out in finding customers.

After the first week in January there will be only one firm of wholesale druggists in Washington street, and that will be Weeks & Potter. Carter, Carter & Kilham's announcement of removal was made some

time ago, and now it is learned that the example of this last named firm is to be followed by Gilman Bros., who intend to soon remove to commodious quarters at 50 to 56 Franklin street.

Councilman Albert C. Smith, of Smith, Benedict & Co., has reason to be highly flattered by the largeness of the vote by which his constituents re-elected him at our recent city election. This will be Mr. Smith's third term in the lower branch of the city government, and this attestation of appreciation by the people of his ward is a fitting tribute to the manner in which he has discharged his official duties.

In the announcements of removal distributed by Carter, Carter & Kilham and Gilman Bros. the pleasing news has been disseminated that it is the intention of both of these firms to discontinue the retail feature of their trade. This information is the subject of favorable comment by the retailers, and the hope is often expressed that the example of these firms will soon be imitated by other houses still adhering to the plan.

The December meeting of the Boston Druggists' Association was held at Young's Hotel on the evening of the 19th. The nearness of Christmas to the regular date of meeting caused the dinner to be held a week earlier than usual. Fred L. Carter, of Carter, Carter & Kilham, and Henry P. Whitmarsh, of Dodge and Olcott, were elected to membership. William C. Durkee, Ph.G., of Kelley and Durkee, made application for membership. An entertainment of a humorous character was furnished by Martyne, professional mimic. Arrangements for the annual dinner, which is to be held on January 23, are being rapidly completed.

Very desirable rooms in the new State House have been assigned to the Board of Pharmacy; this is a source of pleasure to the members thereof, but they must not be unmindful of the fact that there is strong pressure being brought to bear upon the assigning power by other State departments for the identical quarters which have been given to this board. Of course it is understood that these rooms cannot be occupied until the completion of work on the building in question. Meanwhile the members of other commissions are exercising their political "pull," which may result in the disappointment of the Pharmacy Board. Certain members of the board seem to be oblivious to this fact. Such will suffer a rude awakening unless they participate in the keen competition which is just now a feature on Beacon Hill.

The week just closed has witnessed a continuation of the newspaper expose (?) policy which is being pursued in the interest of the "cut rate" firms of this city. The receipt of a list by our wholesale firms containing the names of houses recognized by the Wholesale Druggists' Association as wholesale druggists was the signal for a fresh assault upon the lines indicated above. The animus of this recent article is seen in the attempt to create strife by interviews with firms not on this list and whose names are not found there for the sole reason that their business is not the handling of patents. The list in question came from Philadelphia, and the Boston firms there included are Carter, Carter & Kilham, Gilman Bros., Weeks & Potter,

West & Jenney, George C. Goodwin & Co., Smith, Benedict & Co., Cutler Bros. & Co., Rust Richardson Drug Company, and B. O. & G. C. Wilson. The only other recognized wholesalers on the Massachusetts list are C. P. Alden of Springfield, Bush & Co. of Worcester, and C. H. & J. Prince of Salem.

### Massachusetts Matters.

Mr. Harper, of Salem, has appealed from the fine imposed for violation of his license.

B. L. Keeney is to fit up a room in the Hermann & Litchen building for his drug and news business.

J. Walter Britton has accepted a position as manager of the new Wildes Hotel Pharmacy at Chicopee.

Chas. L. Paine, connected with Dean, Foster & Co., has recently been elected a councilman in his home in Everett, Mass.

C. Arthur Peck, of Malden, and J. Fred Hood, of Turner's Falls, doing business as druggists at Turner's Falls, have filed a voluntary petition in insolvency.

John H. Baxter, formerly of Whitman and more recently clerk at W. R. Bowen's drug store, has purchased the Ward Street Pharmacy, Brockton, and assumed charge yesterday.

A list of the assets and liabilities of Peck & Hood, the insolvent druggists, has been filed in the insolvency court at Greenfield. The assets consist of the stock in trade and fixtures in the store at Turner's Falls and are mortgaged to George S. Peck, Calvin H. Hood and L. D. Graves as security for indorsing a note for \$1,700. The total liabilities amount to \$4,179.

A curious poisoning case occurred at Attleboro on the night of December 29. Seven tramps pooled their funds and sent one of their number to S. P. Clark's drug store to purchase a pint of alcohol. The purchaser represented that he wanted some alcohol for cleaning purposes. The order was filled, but some tincture of aconite was also placed in the bottle, which was properly labeled "poison" according to law, and in addition bore the label "for external use only." The clerk informed the tramp that the bottle contained poison, and his parting admonition to the latter was "Now don't drink this, for if you do you will die." The tramp thought the whole affair a joke, and as soon as he left the store removed the label from the bottle. Each tramp drank his just share of the liquid, and as a result two of them are dead, four very sick, and one is reported as being all right.

### New York State News.

George B. Wray has put in a very handsome double onyx fountain of the Puffer make in his Getty Square store at Yonkers. The fountain is the handsomest one in the town, costing \$2,800.

S. S. Brower, of Yonkers, is just recovering from a rather singular accident. Some seven weeks ago in opening a shelf bottle of fluid extract he broke the neck of the bottle and a small fragment of glass stuck in his hand. He got the glass out but on the next day blood-poisoning set in and he was unable to attend to his duties for seven weeks. He is now at the Terrace City Pharmacy, Yonkers.



## Boards and Colleges.

**NEW YORK ALUMNI.**—A meeting of the Alumni Association of the N. Y. C. P. was held on Dec. 13 at the college building. The report of the committee on final arrangements for the publishing of the "Alumni journal" was read and accepted. The staff of the journal will be as follows: Editor, O. G. Harrison, Ph.G., M.D.; assistant editors, Frederick Hohen-thal, Ph.G., and Harry Heller, Ph.G.; associate editors, Chas. F. Chanden, Ph.G., M.D., Arthur H. Elliott, Ph.D., Hy. H. Rusby, M.D., Virgil Coblentz, Ph.G., Ph.D.

A series of lectures have been arranged for and will be given at the college building under the auspices of the Alumni Association as follows: On January 10 Prof. Virgil Coblentz will lecture on the relationship between the chemical constitution and the medicinal action of the newer remedies. On February 14 Dr. Cyrus Edson will lecture on "Nervous Exhaustion." Prof. H. R. Rusby will lecture on "Observations of a Pharmacognocist in London" on March 14, and on April 11 Dr. James K. Crook will lecture on "First Aid to the Injured."

The report of the delegates to the American Pharmaceutical Association was submitted and adopted, and resolutions of regret concerning the death of Louis F. Hiltz, of Brooklyn, were passed.

**THE MASSACHUSETTS BOARD** has just completed another examination, and thirty-six per cent of the applicants were successful. Certificates were granted to Frank H. Holt, D. Wallace Rintels, Willis H. Standard and James A. Munkley, of Boston; Albert B. Kelley and John Parr, of Lawrence; George F. Butler, of Watertown; Arthur C. Wagner, of Everett; Herbert E. Brier, of Cottage City; Herbert E. Bowman, of Somerville; Emil S. Blumenkranz, of Newport, R. I.; William H. Wallace, of Delmont; Claude Curtis, of Rockport; William H. Davis, of Fall River; Ernest D. Hatch, of Melrose; Howard W. Nowell, of Merrimac.

**THE ALABAMA BOARD OF PHARMACY** will meet at Montgomery on January 25. Candidates should make application in writing to E. P. Gatt, secretary, Selma, Ala., as early as possible and he will give any further information desired.

**THE MASSACHUSETTS ALUMNI** will listen to a lecture from Dr. Augustus H. Gill of the Massachusetts Institute of Technology at the College of Pharmacy building on January 17 at 7.45 P.M. The subject of the lecture will be The Methods of the Investigation of Gases.

## For Headaches and Neuralgia Cures.

Many druggists and physicians dispense and sell their own "headache cures," fever remedies, neuralgic and other remedies for aches and pains. What a boon, therefore, to such is Kefaline-Billroth, an antipyretic and analgesic, originally imported from France, which is guaranteed by the makers to be absolutely harmless and equal, if not superior, to any other analgesic known. Kefaline-Billroth, it is claimed, will not depress the heart's action and does not produce excessive smarting, but will reduce inflammations and temperatures as quickly and surely as any known antipyretic.

In all acute inflammations, congestions, fevers and headaches, or other similar

symptoms, Kefaline-Billroth is recommended by the manufacturers on the score of safety, surety of action and price. Write for particulars, prices for manufacturing, etc., to The Kefaline Co., Boston, Mass., mentioning THE DRUGGIST AND RECORD.

C. G. Bacon & Co., the successors to Fraser & Lee and H. W. Williams, are rapidly getting things in shape to make extensive additions to their manufacturing department. Mr. Bacon expresses himself as very well pleased with the prospects which, in so far as the first month's business of the new firm may be taken as a criterion, are most excellent in spite of the general commercial depression.

Chas. A. Osmun, of 13 Seventh avenue, New York City, will send to any of the readers of this journal free of charge a specimen of his excellent emulsion of cod liver oil and creasote. Prof. Sommerbrodt and many other high authorities have testified to the efficacy of this combination in tuberculosis.

The December price list of Evans & Sons, Limited, of Montreal and Toronto, is just to hand, and we would advise any of our readers who would like to see a neat, well arranged and useful list to write them for a copy, mentioning this journal.

## NEW YORK PRICES.

W. H. Raser, drug broker, of 82 Platt street, New York City, in his trade circular dated December 27, comments on the market as follows: The usual holiday dullness is upon trade, and there is little of interest to chronicle.

Quinine has been in moderate demand at the recently advanced prices. The agents of foreign brands are holding firmly at 22½¢ for bulk in 100 oz. tins, but outside lots can be had at 2¼¢ @ 22¢ as to brand, quantity, and terms. A further advance early in the new year is rather expected.

Opium is quiet but firm. Cases are quoted generally at \$2.20, but \$3 17½ will buy, though it is easier to secure single cases than round lots. Sales have been made in a moderate way for Jan.-Feb. delivery at \$2 15, the usual advance on case figures for broken parcels. Pure powdered opium at \$2.95 @ \$3.

Glycerin is lower. Arsenic, white powdered, is firmer due to small spot supplies; it is, however, quoted lower to arrive.

Acid, oxalic, tending higher; limited orders can still be filled at 6¾¢, though 6½¢ @ 6¼¢ is generally quoted. Acid, citric, single kegs obtainable at 44¢ f. o. b., bbls. at 48¼¢. Acid, tartaric, crystals and powdered, 22 @ 22¼¢ f. o. b. Cream tartar, crystals and powdered, at 18 @ 18¼¢ f. o. b. Chloride lime in good supply and offering at \$1.90 ex dock. Balsam, copaiba, firm at recent advance with a higher tendency.

Balsam fir, Canada, scarce, and holders now asking \$3 75 in bbls. Oregon balsam fir is tending higher also. Chlorate potash is reported higher for next year's deliveries, but as spot it is still to be had at 14¼¢ @ 14½¢ for crystals, and 14¼¢ for powdered.

Mexican sarsaparilla stocks continue light and firmly held at 10½¢ @ 11¢. Honduras sarsaparilla unchanged. Ipecac root firm at \$1.80 @ \$1.85 for prime grades and \$1.25 for inferior quality. American saffron, prime, in bales in at 38¢., in bbls. 39¢., and less quantity 40¢. Coriander seed firm at 5½¢ @ 6¢. as to quality

and quantity. Senega root is offering in the West in lots at 36¼¢. here 40¢. and upward is asked. Serpentina scarce and nominally 80 @ 82¢.

Cascara sagrada prime, old, at 6¢. and 5½¢ for new. Foenugreek seed scarce and held at 2¼¢ @ 2½¢. Smyrna canary seed firm at 2½¢. Sicily seed unchanged. Hemp seed unchanged. Flaxseed higher. California mustard is steady. Caraway, Dutch, good demand at 6½¢ @ 6¾¢. German quince seed tending higher.

Menthol very scarce and \$5 @ \$5.50 and upward now asked. Caffeine advancing. Oils lemon, cubeb, wintergreen and sassafras lower. Peppermint higher.

## Review of the Wholesale Market.

NEW YORK, January 3, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The week under review has been of course much broken up by the holidays and owing largely to this cause the transactions have been limited both as to their volume and their bearing upon the general market conditions. A generally steady market is to be reported, however, though there are a few changes which have been made public on the first of the month, among which are a slight rise in opium and lump sal ammoniac and a decline in wood alcohol, quicksilver and chicle.

ALUMIN has been reduced by the New York Quinine & Chemical Company to \$1.10.

ALCOHOL, wood, has been reduced by the manufacturers to 90¢. for 95% alcohol and 95¢. for 97%. Grain alcohol is stated at unchanged prices.

BALSAMS.—Nothing of interest has transpired in copaiba. Canada fir is held very stiffly at \$3.75, though there is no very brisk demand.

BARBS.—Soap is cabled strong at considerable advances in London, but the market here has been sustained at a price rather higher than the London quotations would warrant, consequently no change was caused by the London advance.

BEANS.—Vanilla are very quiet but holders and dealers alike seem to be confident in the future of the Mexican beans.

CACAO BUTTER has sold at 33¼¢. for foreign; the London auction sales on Tuesday went off at the equivalent of 31¼¢. laid down here.

CAFFEIN has advanced to \$2.30 at an inside figure, though the general quotation is \$2.40 @ \$2.50 and holders are very firm in their views.

CASTOR FIBER continues to be very scarce for prime quality. \$28 is asked by some holders.

CASSIA BUDS job at 18¼¢. Sale of a round lot is reported on private terms.

COLLOCYNTH APPLES are reported in very short supply in the European centers. Our own market is quiet.

DAMIANA LEAVES are quoted 12 @ 15¢. spot, qc. to arrive. No business reported.

ERGOT, Spanish, has been cabled at the equivalent of 24¢. laid down, though the price on the spot is 28 @ 30¢. Prime German reported as sold at 29¼¢.

MENTHOL is still very firm and in short supply at \$5.50, \$6 being the market quotation, though no business has been reported during the week outside of very small jobbing lots.

**OPIUM.**—The continued strong cable from London and Smyrna seem to have at last convinced American dealers that the advance is due to natural causes and not to speculative deals. This is shown by the queer disposition to purchase and a willingness to even pay an advance upon the figure quoted last week. At the close \$2.25 was the quotation for original packages, while for broken lots \$2.25 @ \$2.30 was asked. Powdered offers at \$2.95 @ \$3.10.

**QUININE.**—A fair jobbing business is reported, and this has picked up, of course, somewhat in the last two days since the turn of the year. These orders are filled at 23 @ 22½c. for foreign and large bulk, and 25c. for domestic from manufacture agents. There are some outside lots which can be had at ¼c. under these figures, but second hands are not displaying any disposition to push sales, as they express much confidence in the future of the alkaloid.

**SAFFRON.** American has been concentrated into the hands of comparatively few holders, and stocks have been quoted light, and prices have been advanced to 40 @ 42c. Spanish is reported rather weak and dull.

#### DYESTUFFS.

**CUTCH** is selling in a limited way only and is quoted at 4¼ @ 5c. for SM.

**GAMBIER** is very quiet, though the market shows no sign of weakening, the holder being unwilling to urge sales by means of any concession. The statistical position is regarded by holders as indicative of a probable higher range of prices in the near future. The quotations now are \$3.90 @ \$3.95 ex-vessel and \$4 @ \$4.50 ex-store. Cube gambier is in rather better demand and the market shows more buoyancy. Sales are reported of several hundred bags at 66½c. The stocks on hand are firmly held.

**INDIGO, Madder,** and other staples attract no special attention.

**SUMAC**—The stocks which have come to hand on the Italia have relieved the situation as regards supplies on the spot, and the price has declined to \$75 @ \$77.50.

#### CHEMICALS.

**ACIDS.**—Oxalic continues firm at the advance chronicled last week, 6¼ @ 7c. Tartaric attracts but little attention and jobs in a limited way only, at unchanged prices.

**ALUM** sells in a moderate way at \$1.75 for lump and \$1.80 for ground.

**ARSENIC**, white, is scarce and firm at 3½ @ 3¾c. as to quality and quantity.

**CHLORATE OF POTASH** sells in small lots at 14¼c. for German and 14¾c. for English, though no large contracts are reported.

**BLUE VITRIOL** holds up firmly at 3¼ @ 3½c. though the quality of that offered at the inside figure is called in question by some dealers.

**NITRATE OF SODA** is very dull but holds its own in price at \$1.80 in round lots.

**QUICKSILVER** has attracted considerable attention during the week. The market on the Pacific slope has gone to pieces owing to the destruction of the combination which has heretofore controlled the American outlook. In the cutting which followed the breaking up of the combination a decline of \$5 took place, and where the price was \$37.50 @ \$38 in this market it has gone down to \$32.50 @ \$33. The jobbing quotation is 45 @ 46c. per lb. and the market is somewhat steadier than it was just after the break. Mercurials have not been changed in price, manufacturers apparently expecting some rehabilitation of the market of the parent metal.

**TIN CRYSTALS** has declined from 13¼ @ 14c.

#### ESSENTIAL OILS.

The entire line of essential oils is quiet and the most parts steady. But little demand is reported outside of the few small jobbing orders and prices are unchanged.

**PEPPERMINT.**—No change is reported in the position of this article unless it be that there is slightly easier feeling. The holding off the buyers' tendencies has somewhat weakened the market, and where \$3 was the inside figure last week, \$2.95 or even \$2.97, might now be accepted for small parcels of HGH. Wayre Co. bulk is quoted \$2.60 @ \$2.65, and Western \$2.45 @ \$2.50. Should any active demand spring up the price would probably advance.

#### GUMS.

The mucilaginous gums generally are dull and prices, though they have not been changed in the quotations, would very likely be shaded on firm offers.

**CHICLE**—Some 50,000 lbs. of chicle has changed hands during the week, and at the close the market is quiet at 29 @ 30c.

**SHELLAC** is dull and rather depressed, though the nominal quotations remain unchanged.

#### ROOTS.

**GOLDEN SEAL** has sold in the interval to the extent of about 4,000 lbs. on private terms. Quotations are unchanged to 22½ @ 23c. firm on the spot.

**IPECAC** is jobbing in a small way at \$1.25 @ \$1.35 as to quality.

**JALAP** is dull but holders are firm in their quotations at 25 @ 28c.

**JAMAICA GINGER**, unbleached, is quiet but firm at 14 @ 17c., and stocks are reported to be rather light.

**SARSAPARILLA**, Mexican, has sold at 10¼ @ 11c. During the week the Yumuri came to hand with 21 bales said to be in transit for Europe.

**SENEGA** is dull, quoted nominally at 39 @ 40c., but no sales of any account reported.

**TEXAS SNAKE ROOT** is in very light supply on the spot and quoted 28 @ 30c., the latter figure being the most general quotation.

#### SEEDS.

**CANARY** is quiet though somewhat firmer, with jobbing sales of Smyrna at 2¼ @ 2½c. Celery is quoted at 16 @ 17c. with very little business reported. Caraway, Dutch, offers at 6¼ @ 6½c. and is somewhat easier.

**HEMP**, Russian, is somewhat lower, offering at 2¼c. in round lots.

**POPPY**, German, is in good supply at 6c.

#### Western Winnowings.

Burglars visited the village of Georgetown, Ill., recently and entered the drug store of Gibson & Sharer.

Gregg & Grace's drug store, Cairo, Ill., was unroofed by a heavy storm which passed over Southern Illinois recently.

The drug store on South street, Burlington, Ia., belonging to Dr. Forney, was burglarized recently of \$80 worth of drugs, etc.

For several nights past the drug stores of Sherman, Texas, have been systematically robbed; as nothing but morphine has been stolen, it is supposed to be the work of a morphine fiend.

The drug store of the late John G. Dirksen, Pekin, Ill., has been sold to Jacob Saal and Emil Ketterer, the purchase price being \$2,900. Mr. Ketterer, who is an experienced druggist, will conduct the business.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

**PHYSICIAN** wanted who has done retail work among physicians, for manufacturing chemists or wholesale drug houses, to take similar position with an importing drug house. Also physician to occupy position in office to attend to correspondence with physicians; state experience, reference, etc. Lock Box 2178 New York City.—2.

**WANTED.**—Novelties and specialties of any kind that can be sold by druggists. We have men traveling in Southern and Southwestern States all the time and we buy anything we can sell; this is a good opportunity to introduce your goods. Send price lists and full particulars to "Snap," care AMERICAN DRUGGIST, 37 College place, New York.—2.

#### POSITIONS WANTED.

**RELIEF CLERK.**—Young man desires position as relief clerk, registered, German and English, for Saturday, Sunday or Monday; highest testimonials. Address "Physo stigma," care this office.

**DRUG CLERK**, New York State licentiate, twenty years' experience city and country; temperate, competent, good business qualifications and good habits, desires permanent position; low salary; country preferred. Address, for ten days, "Pharmacist," Box 507, Bath, Steuben Co., N. Y.—26.

**SITUATION WANTED** by a graduate of Ontario College of Pharmacy and Bachelor of Pharmacy; wholesale and retail experience; best of references. Address W. Turner, Chatham, Ontario.

**SITUATION WANTED** as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

**JUNIOR DRUG CLERK.**—A graduate N. Y. C. P., 18 months' experience, wishes a situation; will sleep in store; wages moderate; best reference. Address Lester Carde, 374 15th street, Brooklyn.

#### BUSINESS OPPORTUNITIES.

**WANTED MONEY** to help establish a pharmacy; have a little cash; 10 years' experience; good record; age 25; German American, and will hustle; would buy on easy terms. Address Charles Wilhelm, 135 Chenango street, Buffalo, N. Y.

**FOR SALE.**—In Central New York, the leading drug store is a live, growing town of 4,000 inhabitants; large country trade; no cutting of prices; only two drug stores in town; located on central corner; good reasons given for retiring. Address: "Eugene," at this office.

**FOR SALE.**—Old established drug store, in Pennington, N. J.; live stand; no other drug store nearer than five miles; stock, drugs and stationery; semi-annual town; opportunity for a cash buyer; owner studying medicine. Geo. W. Scarborough, Jr., Pennington, N. J.—2.

**DRUG STORE WANTED.**—Brooklyn: \$3,000 to \$4,000 cash; won't pay a fancy price; quote your lowest figure. "Cash Buyer," 37 College place, New York.

**DRUG STORE FOR SALE.**—One of the nicest and best equipped drug stores in central Pennsylvania; best location in town; between depot and post office (one minute walk from either); 6,000 inhabitants, with good surrounding country; three other stores in town; store 30 by 18, laboratory 16 by 16; cheap rent; established 10 years and well advertised; several good paying proprietary articles; no cutting; full price for everything. The amount I have paid for goods bought from Jan. 1 to Dec. 20, 1893, are as following:

Shoemaker & Busch (for drugs).....	\$2,441.48
Allen (for alcohol).....	630.89
Segars.....	405.89
Miscellaneous (perfume, soap, brushes, sponges, etc.).....	1,308.76
Total.....	\$4,786.02

Will inventory over \$3,000, not including \$225 National cash register, six months in use; will sell all and good will for \$3,500; good 1 da trade; both gas and electric light; fans and watermotor; reason for selling, am going in hotel business in same town and just one block from drug store. H. W. Leister, Huntingdon, Pa.—1.

# American Druggist

## and Pharmaceutical Record.

### A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIV. No. 2.

NEW YORK, JANUARY 11, 1894.

WHOLE No. 261.

AMERICAN DRUGGIST PUBLISHING COMPANY,

37 College Place, New York.

A. R. ELLIOTT, President.

#### SUBSCRIPTION PRICE.

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If paid in advance direct to this office, -	1.50
For Foreign Countries, -	2.50
Single Copies, -	15

The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

#### SELF PRESERVATION.

**W**ILL you help yourselves? That is the question for the retail drug trade to determine, and the answer must be given unequivocally at the meeting of the convention of the Interstate Retail Druggists' League to be held in this city on February 6, the only way out of the varied and serious perplexities which beset the pharmacist on every side. The vigorous, pointed and manly call for a convention of the Interstate League to be held in this city, which we published last month, deserves and we hope will meet with hearty and widespread response. It is in this city that the most vigorous effort must be made. The convention has been called here largely at the instance of the New York City branch of the League, and it behooves us to have a local delegation which is commensurate with the size and importance of this city.

If you have not already joined the League send your name either to CHAS. A. OSMUN, at 18 Seventh Avenue, or to VICTOR KOSTKA, at 700 Ninth Avenue.

It is no chimerical or visionary scheme that you are asked to support. Your most vital interests are at stake in every direction. The Detroit Plan promises alleviation of the cutting evil. It is admitted that a return to full prices is not to be contemplated, at least in this section, but there is no doubt that by a sturdy and united effort a scale can be adopted which will yield a small

profit. How this is to be done is shown in the following resolution of the special committee appointed to confer with the committee of the National Wholesale Druggists' Association on the "Detroit Plan."

**RESOLVED:** *First.*—That the contract plan is the only practical method for the maintenance of fair and legitimate schedules for prices of proprietary articles.

*Second.*—That in order to strengthen and render this plan more effective, it is respectfully recommended that proprietors accept orders for full quantities, with rebate discount only from regular houses recognized as belonging to the number who will faithfully observe the prices and conditions established by the manufacturers.

*Third.*—That, in the opinion of the joint committee, the forms for price lists herewith submitted embody, in the main, features which would tend to give stability to the plan, and they are commended to the favorable consideration of proprietors. The committee consider it desirable that, as far as practicable, proprietors generally adopt uniform or similar forms of price lists.

*Fourth.*—We recommend that proprietors be requested to furnish to the chairman of the committee on proprietary articles of the National Wholesale Druggists' Association, and the committee on trade interests of the Association of Manufacturers and Wholesale Dealers in Proprietary Articles, full lists of their customers, with the understanding that in cases where it is proven that contracts have been violated they shall be refused further supplies. Also that in case of receiving orders from others their names shall be submitted to the chairman of same committees for approval, before filling them.

FORM OF LETTER FROM MANUFACTURER TO WHOLESALE AGENTS.

Office of.....(date)

GENTLEMEN:—We have this day established a selling price for our preparations, as per inclosed price list.

We shall be pleased to have you act as our selling agents and will make shipments on conditions and terms as below stated.

On receipt of your acceptance of our selling agency, for which we herewith inclose blank form for your signature, we will forward you such quantities as you may desire, in lots of not less than \$.....

In consideration of your maintaining our selling prices and complying with all the regulations herein mentioned we will allow you a commission of .....per cent. on our selling prices, provided that the net amount is remitted to us within .....days from date of each invoice. We will also allow you .....per cent. for cash off net amount, if remitted in .....days from date of shipment.

We will prepay freight to your railroad depot or wharf, but goods are at your risk after delivery to transportation company. You are not to sell at less than our list prices, but may, if you desire, allow your customers not over .....per cent. for cash in .....days from date of shipment.

Our prices shall not be cut by you, or your salesmen or agents directly or indirectly. When we can prove that you have wilfully cut prices, we will withdraw our selling agency and notify all other

selling agents that no sales shall be made to you except at long prices. We sell only through our selling agents.

We desire to have retail dealers fully protected in obtaining the regular prices, and all selling agents will refuse to supply all recognized and voluntary cutters of prices of any proprietary articles, whether wholesale or retail dealers.

Furthermore, whenever the retail trade of any city, town or county have organized a league or association embracing 80 per cent. of such dealers located in such city, town or county, and have established a schedule at which proprietary articles shall be sold by its members, and such facts shall be reported to you, either by such organization or by the undersigned, then you shall not supply our goods to any dealer in such city, town or county who sells proprietary articles in violation of such schedule so established, except at full retail prices.

We have endeavored to make a plan just and equitable to all regular houses recognized as belonging to the number who will faithfully observe our terms and will give no other discounts or terms than herein stated, no matter how large the quantity, and assure you that we will adhere strictly to these regulations and require like observance by all our selling agents.

We believe our efforts in the interests of both jobbers and retailers will be appreciated, and will receive their cordial approval.

Please let us hear from you promptly.

Very respectfully yours,

THE FORM OF ACCEPTANCE IS AS FOLLOWS:

.....1893  
Messrs.....

Dear Sirs:

We hereby accept the selling agency for your preparations on the conditions stated in your circular of November 1, 1893, and pledge you our faith and honor to strictly maintain your selling prices, and faithfully conform to all your conditions.

Yours truly,

In Boston the wholesale druggists have through their salesmen circulated petitions for signatures among the retail drug trade and have done so with marked success. The same course will probably be pursued in this city, the matter coming up for discussion at the meeting of the New York City branch of the Interstate League this afternoon. The petition to be signed reads thus:

The following apothecaries, believing the Detroit Contract Plan is a practical method for the maintenance of fair and legitimate prices, hereby petition the makers of proprietary goods to adopt that method of selling their preparations, and agree not to sell, directly or indirectly, products, the makers of which agree to the retail features of the Detroit Plan, at less than the prices recommended by the "Apothecaries' Association" of this vicinity.

This agreement to take effect when 80 per cent. of the retail apothecaries of this vicinity have signed this agreement.

Notice of this to be sent at least one week in advance of declaring the proposed list of prices in force.

But it is not "by resolution" alone that the League is to be of aid. It may be and no doubt will be made a powerful factor in protecting the legal interests of the pharmacists. Subjected to the most embarrassing legal restrictions, the pharmacist is given no recompense in the way of protection. This can be remedied, but it can only be done through organized effort, and this will be paid especial attention to by the League.

Is it not unconstitutional that the pharmacist is, under the law just about to go into effect in this State, compelled to pay a liquor license of thirty dollars merely for the privilege of dispensing liquors on prescriptions?

These and like questions can be taken care of by the League if you will give it your support.

What with physicians dispensing their own tablets free, grocers selling impure drugs at less than the cost of the pure articles, and drygoods houses selling proprietary medicines and fancy articles at retail for wholesale prices, the pharmacist is crowded out unless he is willing to help himself.

Is it not worth a few hours' time and two dollars per year?

Send your name either to CHAS. A. OSMUN, 18 Seventh avenue, or to VICTOR KOSTKA, 700 Ninth avenue.

If you have a plan that may help the organization let us hear from you, and hear from you now.

Come to the meeting at 194 Third avenue, this (Thursday) afternoon at two o'clock. If you don't approve you need not join. It will cost you nothing to come.

WHEN homœopaths prescribe the one hundreth centesimal dilution of the "tears of a young maiden in great grief" as a specific for the woe of a love-lorn maiden we merely smile. But when a high potency dilution of virus is administered internally as a substitute for the rational and time-tried method of vaccination and when children so treated are sent to the public schools as "vaccinated," their foolery ceases to be humorous and becomes dangerous to public safety. Some of the Brooklyn school principals have accepted in lieu of certificates of vaccination certificates of treatment with variolin, the homœopathic dilution of vaccine virus. This should, and no doubt will, be stopped. Patients may trifle with disease so long as the disease is their own, but should not be allowed to endanger the welfare of others.

ENGLAND has a Royal commission engaged in investigating the question of the habitual use of opium as practiced in India, and of the effects, moral and physical, of that use. Much evidence has been given by medical men to the effect

that its use is not objectionable, but even occasionally beneficial. An attempt to stop it would probably bring about another Sepoy rebellion. The commission is still at work.

ROBERT BENTLY, the leading pharmaceutical botanist of England, is dead at the age of seventy-two years. He was Professor Emeritus of the Pharmaceutical Society School, having abandoned active labor in 1887. His "Manual of Botany" stands in the front rank as a text book, and his work both with the pen and as a lecturer was of the very first order of merit.

INFLUENZA, or "grip," continues to increase in virulence in Europe and is rapidly becoming more prevalent here, more particularly along the Atlantic coast. It should be remembered that while the death rate of the disease is low it is by no means a trifling ailment, but requires prompt and intelligent treatment.

### What They All Say.

American Druggist Publishing Co. Gentlemen: We have had a great many replies regarding our advertisement. \* \* \*—*The Standard Flint Glass Works.* Wm. Kummerle, Jr.

### Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

Glycerin Jelly. W. H. B., Philadelphia.—A series of formulas for preparations of this nature were published in the DRUGGIST AND RECORD for December 14, 1898, page 338.

Piso's Consumption Cure. E. A. H., Camden, N. Y.—The following is said to produce a preparation closely resembling the original:

Tincture of tolu.....	½ ounce
Fluid extract of lobelia.....	2 drachms
Fluid extract of cannabis indica.....	2 drachms
Chloroform.....	1 drachm
Morphine sulphate.....	4 grains
Tartar emetic.....	4 grains
Essence of spearmint.....	10 drops
Water.....	8 ounces
Sugar.....	14 ounces

Mix the fluid extracts, tincture of tolu, chloroform and essence of spearmint, and to this add the sugar. Dissolve the morphine and tartar emetic in hot water, then add the remainder of the water to the other ingredients contained in a large bottle. Shake and allow to stand before decanting.

Works on Perfumery. H. G., Cincinnati, Ohio.—Among the best of these are Askinson's "Manufacture of Perfumery," Piesse's "Art of Perfumery" (rather antiquated, but still with some valuable features), Christiani's Perfumery and the

Kindred Arts; J. Chas. Sawyer's Odorographia; Cooley's "Cosmetic Art;" Hirschel's "Toiletten chemie;" and Mierzinski's "Die Riechstoffe."

Shampoo. M. H., New York City.—A good shampoo, for removing dandruff, etc., from the scalp may be prepared by dissolving borax in water, with or without the addition of a little carbonate of ammonium. Very generally, carbonate of potassium is used by barbers. The proportion of these salts is about ¼ oz. to the pint. A stimulating effect may at the same time be produced by the addition of some alcohol or bay rum. We think the following a very good preparation:

Borax.....	1 oz.
Carbonate ammonium.....	½ oz.
Aromatic spirit of ammonia.....	1 f. oz.
Bay rum.....	4 f. oz.
Water, to make.....	1 quart

Hand Grenade Fire Extinguishers. J. O. J., Massachusetts.—These are dependent for their action principally upon the volume of carbonic acid gas given off when the bottle is broken. Their contents vary, so far as we know. One kind which we have examined contains a sediment of about ¾ inch in depth and a colorless liquid. On opening the vessel cautiously, a certain amount of free carbonic acid gas is given off, but the pressure is not very great. The liquid contains a great amount of chloride of sodium, perhaps partly formed in the bottle by the mutual reaction of hydrochloric acid and carbonate or bicarbonate of sodium. Besides, the liquid contains chloride of ammonium, sulphate of ammonium, and bicarbonate of sodium. There are minute amounts of other substances present, probably only impurities from the ingredients used. The sediment is bicarbonate of sodium (chiefly). In one of the original patents, it is stated that the acid is contained in a separate receptacle, in the stopper, but in the grenade we have examined, this is not the case.

We have read of other constituents which have been found in some of these grenades—for there are several kinds in the market—all of them, we have been told, made under a license from the original patentees; but we have not examined them.

Meeting of New York State Board. X. Y., Auburn.—The next meeting of the board will be held at Syracuse. The next examination will be held simultaneously on February 24 at Albany, Rochester, Syracuse, Whitehall and Yonkers. Intending applicants should send in their names to Edward Dawson, Jr., secretary, Syracuse.

## CORRESPONDENCE.

### More Errors in the Pharmacopœia.

To the Editor AMERICAN DRUGGIST:

I wish to call your attention to two errors in the new pharmacopœia which came under my notice a few days ago. On page 156 under *Extractum Opii*. Preparation *Emplastrum Opii*, omitted. An error of omission, however, of no importance. On page 261, morphina, 9th line from bottom, in making test distinguishing morphine from strychnine, potassium permanganate should evidently read potassium bichromate.

DR. BUCKLE.

LOUISVILLE, Ky.

# News and Notes.

## Membership Committee of the American Pharmaceutical Association.

The following motion was adopted at the Chicago meeting of the American Pharmaceutical Association:

That the president be instructed to appoint a special membership committee, to consist of one member from each State and territory, and one from the District of Columbia, and the provinces of Nova Scotia, Ontario and Quebec. The duty of said committee shall be that of soliciting new members in their respective sections of country. They will report to, and act under the direction of the chairman of the council, Prof. J. M. Good, St. Louis, Mo., and the chairman of the committee of membership, Prof. Charles Caspari, Jr., Baltimore, Md.

Considerable time has been required to secure the acceptance of distant appointees, but the earnest and enthusiastic letters received from many indicate that the great advantages of membership are appreciated, and the present year promises to be one of exceptional progress in this direction. The thanks of the Association are due to Prof. Whelpley for the practical suggestion.

The following named members have accepted the appointment:

Alabama—Philip C. Candidus, Mobile. Arizona—Clemens L. Bachman, Phoenix. Arkansas—Wm. W. Kerr, Russellville. California—Prof. Wm. M. Searby, San Francisco. Colorado—Chas. S. Kline, Denver. Connecticut—Chas. A. Rapelye, Hartford. Delaware—John M. Harvey, Wilmington. District of Columbia—Saml. L. Hilton, Washington. Georgia—Dr. Henry R. Slack, LeGrange. Idaho—Albert O. Ingalls, Murray. Illinois—T. H. Patterson, Chicago. Indiana—Josiah K. Lilly, Indianapolis. Iowa—Mrs. Rosa Upson, Marshalltown. Kansas—Mrs. M. O. Miner, Hiawatha. Kentucky—Dr. Wiley Rogers, Louisville. Maine—Edward A. Hay, Portland. Louisiana—Alex. K. Finlay, New Orleans. Maryland—Prof. D. M. Culbroth, Baltimore. Massachusetts—Prof. W. L. Scoville, Boston. Michigan—Arthur S. Parker, Detroit. Minnesota—James C. Hening, Stillwater. Mississippi—John C. Means, Natchez. Missouri—Prof. H. M. Whelpley, St. Louis. Nebraska—James Reed, Nebraska City. Nevada—William A. Perkins, Virginia City. New Hampshire—Andrew P. Preston, Portsmouth. New Jersey—Wm. C. Alpers, Bayonne. New Mexico—James A. Zinnear, Deming. New York—Caswell A. Mayo, 37 College place, New York City. North Carolina—Henry M. Chears, Plymouth. Ohio—Louis C. Hopp, Cleveland. Oregon—Geo. C. Blakely, The Dalles. Pennsylvania—Prof. Frank G. Ryan, Philadelphia. Rhode Island—Henry J. Alfreda, Providence. South Dakota—Irvin A. Keith, Lake Preston. Tennessee—James O. Burge, Nashville. Texas—L. Myers Conner, Dallas. Utah—Frank A. Druell, Salt Lake City. Vermont—Henry A. Chapin, Brattleboro. Virginia—Edmund R. Beckwith, Petersburg. West Virginia—Edwin L. Boggs, Charleston. Wisconsin—John A. Dadd, Milwaukee. Quebec—Seraphin Lachance, Montreal. Nova Scotia—Francis C. Simson, Halifax. Ontario—John Lowden, Toronto.

Every pharmacist of good moral and professional standing, whether in business on his own account, retired from business, or employed by another, and those teachers of pharmacy, botany and chemistry, who may be especially interested in pharmacy, and materia medica, who, after duly considering the objects of the association, and the obligations of the constitution and by-laws, are willing to subscribe to them, are eligible to membership.

The large volume of proceedings issued annually to the members containing the valuable and exhaustive report on the progress of pharmacy, embracing all of prime value that has appeared in the leading chemical and pharmaceutical journals in this country and Europe, is of greater value than the membership fee.

It is hoped that the druggists of each section, will have a local pride in aiding the members of the committee representing them to present to the next annual meeting at Asheville, N. C., the largest accession of members ever secured.

The following sections have not responded, and the president would be pleased to have volunteers offer their services, addressing E. L. Patch, Boston, Mass.: Florida, South Carolina, Washington State, North Dakota and Wyoming.

## Random Notes of a Rambling Journey.—III.

SAVANNAH, GA.

Swampy rice-fields alternating with forests of moss-draped cypress, pine and live-oak trees are features distinctive of the scenery to right and left of the line of the Charleston & Savannah Railroad between the points named. Allowance being made for the difference in time between eastern and central standards the distance of some 115 miles between the two points is covered in about four hours, the train leaving Charleston at 8.15 P.M. reaching Savannah the same evening about 6.30 o'clock. The view along the line of route is dismal at best, and conveys but a poor impression of South Carolina and its resources. Everywhere is evident the lack of that enterprise and energy which has contributed so much to the wealth of the adjoining State of Georgia!

As "the apparel oft proclaims the man" so the railroad depot is often an index of a city's progress. My first impressions of Savannah were favorable and pleasing, its railroad depot being marked by an appearance of bustle and business that I found absent from older and larger cities to the north. These agreeable impressions were deepened and strengthened during my stay in the city by walks and drives through its busy thoroughfares of business, fashionable promenades and numerous parks and squares. The beautiful semi-tropical vegetation which borders the residence streets and grows freely in the public parks and squares is especially pleasing, while the sight of roses, tea olives, violets and other flowers in full bloom in the latter part of December was a surprise of the most agreeable kind.

Opposite the magnificent De Soto Hotel is the pharmacy of Solomon & Co., one of the most handsomely appointed stores to be seen south of Philadelphia. The fixtures were designed by Bangs, of Boston, and are a standing advertisement of the excellence of his work. Dark mahogany has been used throughout, and the rich effect of this wood is heightened by windows of stained glass and an array of exquisitely molded tinctures, which are in turn set off by a line of antique extract jars in white porcelain with gold labels of Spanish design. Flowers and foliage plants were the chief decorations of the windows, and conspicuous among these floral effects was the "kaleidoscope pepper," a shrub which is distinguished by its vari-colored berries, as many as nine different shades of color appearing while the berries last.

The grip was epidemic in Savannah at the time of my visit, and the druggists of the city were kept unusually busy. At Solomon's pharmacy upward of 100 prescriptions were being dispensed daily. The firm of Solomon & Co. consists of I. A. Solomon and J. M. Solomon, who conduct two stores—one a retail establishment under the Guards Arsenal (recently constructed) and another in Bay street where a wholesale trade is carried on. Other prominent Savannah pharmacists are Lippman Bros., R. C. McCall, W. M. Mills, Dr. R. J. Nunn, P. B. Reid, and Robt. A. Rowinski.

Savannah also boasts of two colored pharmacists, one of whom only is in busi-

ness for himself. His name is J. Henry Bugg, and he is an M.D. of the Lennon Medical College, Raleigh, N. C. White people patronize him for simple remedies.

One of the beautiful attractions of Savannah is Forsyth Park. It is small in size but has a wealth of pines, roses, coleas palmettos, oleanders, jasmine, cacti and magnolias, not to mention numerous other plants of exotic growth, which conspire, to make a very pleasing impression.

No one goes to Savannah without visiting Bonaventure cemetery. It is reached after a pleasant drive of about five miles over the Thunderbolt Shell Road, and is famous for its avenues of live oaks draped with Spanish moss. These immense trees with their weird covering of smilax-like moss extend their long branches over the avenues like the arms of so many witches whose owners might be hurling curses on the traveler below. The scene is inexpressibly weird and picturesque. Through the branches can be obtained an occasional glimpse of blue sky, while through an opening at the far end of the avenue can be faintly discerned the Warsaw River and its heavily wooded banks.

THOS. J. KEENAN.

## Gotham Gossip.

The Germans are social people in a hearty expansive fashion. They do not grow old so quickly as do the English or Americans. They do not become so absorbed in business as to lose all taste for social pleasures. At the Young Arions' ball some weeks ago—a very handsome and enjoyable affair—I noticed a number of druggists. There were Dr. Wm. Balser and his son-in-law that soon is to be; Oscar Goldman, who now owns the store at Clinton and Rivington streets; Aug. Eimer and C. Eimer, of Eimer & Amend; Robert F. Amend of the same firm, treasurer of the Young Arions and a very prince of good fellows; H. Jarrett, the New York representative of the Mallinkrodt Chemical Co., divorced, for a short time only, from his eternal cigarette; A. C. Behrens, whose muscular arm and vigorous spirit eminently fit him for his office as president of the Ph. G. Bowling Club; F. G. Werner of Ninth avenue, who bears his years so well that one can scarcely realize that he is a N. Y. C. P. man of '74; M. Arnemann, who hails from Seventh avenue, and F. Ehrmann, Jr., of Park avenue. No wonder they look young, the Germans; they keep young—they enjoy life—temperately but heartily.

In chatting about organizing the retail drug trade with a prominent New York druggist this week, that gentleman said, "Yes, the Germans are, as a class, more 'gregarious' than are Americans of a corresponding position. This has been shown in the history of every effort to organize the drug trade of this city; even the present interstate league has a much larger proportionate number of Germans on its rolls than of Americans." I, too, had observed this in other directions. The most active organization of druggists in the city is the "Deutsch-Amerikanische Apotheker Verein." The membership of the Ph. G. Bowling Club is composed largely from those of German birth or parentage, and it was the support of the German element that carried the New York college through some of the most trying periods of its existence.

The most interesting social event of the year for the pharmacist, probably, is the annual ball of the German-American Apothecaries' Society, which takes place



this year at Tentonia Assembly Rooms on Friday, January 19. The chairman of the committee, A. C. Behrens of Forty-first street and Eighth avenue, reports a large number of tickets already sold and says the prospects of duplicating the brilliant success which attended their balls for the past two years are most excellent.

The Union Chemical Works, of 15 Cedar street, whose factory is at Newark, N. J., has been placed in the hands of a receiver, Morris E. Sterne, on the application of the directors. One suit for \$31,892 has been begun against the company, and suits for \$150,000 more are threatened. Louis Engelhorn is the president of the company, and he, with Dr. Engelhorn, owned only twenty shares of the stock. A receiver in supplementary proceedings was appointed for Louis Engelhorn three weeks ago. The liabilities are about \$290,000, divided among twenty-seven creditors, the largest ones being as follows: W. H. Ladenburg & Soehne, Mannheim, Germany, \$148,572; Dr. F. Engelhorn, Jr., as transferee of C. F. Boehringer & Soehne, Mannheim, \$51,860; Lazard Frères, \$39,470; J. L. & D. S. Riker, \$26,452, and Ladenburg, Thalmann & Co., \$15,509. The assets are placed at \$136,192. All the manufactured stock except \$10,000 is pledged as collateral for advances. Bradstreet's took away the company's rating in October.

Harry P. Bissell, Ph. G., was married on Jan. 1 to Miss Flora M. Randall. Mr. Bissell is a graduate of the N. Y. C. P. class '98. He is what might be called a natural druggist, and one who wins the best wishes and good will of all who know him, and who makes friends everywhere as he did among his college instructors and acquaintances. Mrs. Bissell is a young lady of very amiable qualities and one who will be sure to gain the esteem and high respect of all among whom her lot in life is cast. The young couple start off with pleasant prospects and the wish from their numerous friends of a happy and prosperous voyage through life.

William Dean Howells, the novelist, tells us, in the record of his "Literary Passions," that while a boy he was sent to his uncle's drug store to engage in the drug business, but that an experience of a day led him to abandon it. This experience he recalls as having been particularly painful. It may be inferred from this that his first task was to wash out copaiba-soiled mortars.

S. M. Burroughs, the public spirited and benevolent American pharmacist of London, of the firm of Burroughs, Wellcome & Co., has contributed \$5,000 as initiative toward a fund for building a college hospital at Dartford, England.

#### Boston Budget.

Our board of pharmacy has recently held one of its most important meetings, at which a new era was inaugurated toward suppressing some of the illegally conducted drug stores of this State. This movement will be received favorably by the pharmacists of this commonwealth, but will not meet the approbation of that portion of the trade whose business is conducted upon certificates of registration which will not bear investigation. The object of this meeting was to consider complaints against Charles A. Slee, of Marblehead; Dr. E. A. Cardin, of Fall River, and William F. Tripp, for the violation of Section 1, chapter 472, of the acts of 1893. This is an act relative to complaints against registered pharmacists,

and the section under which the complaints were drawn prohibits any registered person from permitting the use of his name or his certificate of registration, by others in the conduct of the business of pharmacy, when he himself is not the owner and actively engaged in such business. This act gives the board the power to suspend any person's registration as a pharmacist and his certificate thereof, for such term as may be deemed for the best interest of the public, and in flagrant cases the certificate may be revoked. This law went into effect last June and these were the first complaints to be brought under it. President Whitney, Secretary Butler and the other members of the board were present at this meeting, which was held behind closed doors. The three defendants were notified of the hearing, but only William F. Tripp appeared. Tripp's case received the attention of the board first and it appeared that his certificate was obtained in 1885 and that he remained in the drug business until 1887, when he engaged in railroading; from this time to 1892 he had no connection with pharmacy in any way. During the latter year he entered into an agreement with a person who was about to open a drug store, and who was desirous of hiring or purchasing a certificate, by which, for the consideration of \$10 a month, his (Tripp's) certificate could be used. In Slee's case it was shown that an agreement had been made by which a man not registered was to obtain a sixth-class liquor license contrary to the statute upon his (Slee's) certificate. Slee being at this time engaged in other business. From the evidence in Dr. Cardin's case it appeared that his certificate had been let for \$3 per day. Both Tripp and Slee obtained their certificates upon the enactment of the first pharmacy statute, leaving Dr. Cardin the only one of the trio to secure his certificate by examination. After a careful review of the facts presented in these cases the board voted unanimously to revoke the certificate of William F. Tripp, numbered 2880; and that the certificate of Dr. E. A. Cardin, numbered 3083, and that of Charles A. Slee, numbered 1039, each be suspended.

E. I. Sawyer, 3125 Washington street, has a new Low Art Tile fountain.

Theo. F. Rice & Co. are the present proprietors of the store 1005 Washington street.

The prevailing sickness has given business a fresh impetus. This is noted more especially in the prescription department.

E. H. Grover, of 4th street, South Boston, H. C. Hall, Waltham, and T. R. Shannon, Hartford, Conn., have very generously donated their building fund bonds to the use of the Massachusetts College of Pharmacy.

"No goods sold at retail" is prominently displayed in the windows of Gilman Bros., wholesale druggists. Hon. Gorham D. Gilman, of this firm, has an enviable reputation as a lecturer, and he has delivered his illustrated talk upon "Hawaii" many times of late.

#### Lowell Letter.

C. I. Hood's flat is to be a beauty.

Forrest Durant has accepted a position of Howard & Shanahan on Central street.

In the death of Roger Lang, Lowell lost one of its oldest druggists as well as one of its ablest and most respected citizens. Mr. Lang was well known for his many kind acts to the needy.

Eddy Shanahan, of the Opera House Pharmacy, is spending a few days in Providence.

"The Lowell Pestles," as five stalwart Lowell druggists have seen fit to name themselves, claim they can "do" any other team of bowlers in the State.

Oscar Wilson, of the firm Storey & Co., has returned from his studies, and is now a full fledged M.D. His shingle is located at the old stand of Davis Cor.

S. C. Shirley, Gorham Hall Pharmacy, has recently removed into his handsome new cottage on Gates street, which he built at a cost of several hundred dollars last Fall.

No business was done at the last meeting of the Lowell Druggists' Association as there was not enough druggists in attendance to form a quorum. This association is proving a great thing for the Lowell druggist. Uniformity in prices and a friendly feeling all around now seem to be the general run of things. Interest should not be allowed to lag as it is a really good thing for all.

One of Lowell's most able officers, Simon B. Harris, has been engaged by the board of pharmacy to look up the disreputable druggists of the State. In the choosing of Mr. Harris for that work the board used most excellent judgment, for a more efficient person could scarcely be found in the whole New England for that work. He will surely root out the impostors. Being well versed in all points of law and not to be taken in camp by bluffs, "gab" or "jollies," nor to be frightened, he will prove a grand acquisition to the legitimate druggist.

#### Massachusetts Matters.

C. H. Bangs will furnish the new fixtures for J. C. Oxley's store, Reading.

David F. Baxter, Brookline, is regaling his customers with hot soda from one of Tufts' elegant fountains.

Edward Farrar, of Medford, has opened a new store. C. P. Whittle supplies the fixtures, and the fountain was manufactured by the Low Art Tile Co.

Dennis F. Hartnett has opened a new store on Boston street, Salem, in the store formerly occupied by Mr. Griffin. Hugh Gray, with Frank Grader of Lynn for many years, will be manager for Mr. Hartnett.

#### Maine Mention.

J. E. Footer is to open a new store at Bath.

F. A. Shurtleff, South Paris, has a new fountain.

E. E. Boynton opened a new and elegant drug store in the Fletcher block, Camden.

The firm of Tucker & Larrabee, of Waterville, has been dissolved. Mr. Larrabee buying out his partner's interest.

S. R. Crabtree has opened a new drug store in Island Falls, and is having a good business. He is the only druggist within a radius of 30 miles, and undoubtedly will receive a good patronage.

A novel case has recently been entered in the Supreme Court at Auburn. It is the first of the kind on record, and is a bill in equity against the owner of a building located in Lewiston, in which, it is said, intoxicating liquors are sold. A portion of this building is used as a drug store (?), and here, it is alleged, the illegal business has been transacted. The case will be warmly contested on both sides.

### Connecticut Cullings.

The Williams & Carlton Company, a leading drug firm at Hartford, has been made a joint stock association.

The brick block corner of State and Edward streets, New Haven, has been sold by George Hugo to T. C. Trefry, the druggist in the block.

James W. Waterman, of Mystic, has been making some extensive improvements in the interior of his store, so that it now assumes a very handsome appearance.

John Bonney has reopened the drug store in Shering & Holme's block, New Britain. Improvements are being made in this store, including a new fountain from the Low Art Tile Co.

### Philadelphia Pharmacists.

The first change to be reported this year is the well-known drug store at 15th and Market streets, which occurred on January 2d. Several years ago Amos Yarnall & Co. conducted a wholesale and retail business at this stand and were afterwards succeeded by E. C. Jones & Co. Every one in the city knows and respects Edward C. Jones and nearly all are familiar with the cause of his retirement. To those who don't it may be said that Mr. Jones' kindness and generosity and constant desire to help others got the better of his judgment and led him into extending credit to many who proved unworthy of his confidence. The store then passed into the hands of W. H. Earl & Co., who found it a task more difficult than was expected to build up a business that for years had been losing ground. Two years ago Mr. Earl closed the wholesale department and has since devoted his attention to the retail trade. Early in December he concluded to retire from business and consulting Frank E. Engelman, solicitor and druggists' attorney, placed the store in his hands for sale. As this location is conceded by experts to be one of the best in the city, Mr. Engelman lost no time in approaching some of our leading druggists who he considered would appreciate such an opportunity. The proverbial slowness of dwellers in the city of Brotherly Love has received another exemplification, for, while undoubtedly one or other of these gentlemen might, by next Christmas, have decided to make the venture, a New Yorker comes along and secures the prize. A. Eugene De Reeves, the purchaser, during the past three years has visited nearly every prominent drug store in the United States, and his natural astuteness and large experience led him in a moment to perceive the advantages of this location, and he hastened to close the bargain. The store is immediately opposite the Market street exit of the new Pennsylvania depot, and is unquestionably more favorably situated than any other pharmacy in the neighborhood to catch transient trade from the numerous passengers on this road. Mr. De Reeves is a graduate of the Philadelphia College of Pharmacy and was formerly with J. T. White at 21st and Pine streets, afterward with Milton Campbell, Mr. White's successor. He was next employed by the H. K. Mulford Co. as salesman, and for the past three years has traveled from the Atlantic to the Pacific in the interests of The Trommer Malt Co. Mr. De Reeves is a bright and energetic young man, courteous in manner and of considerable business ability. His many friends wish him abundant success. He has selected a choice stock of drugs, toilet requisites, etc., a full line of fine sponges and chamois bought from W.

B. Burk & Bro., an elegant lot of imported and Key West cigars, and the public have already discovered that, to quote Mr. De Reeves' words, "everything that is found in a well equipped drug store anywhere can be obtained at this establishment."

Walter F. Ware, manufacturer of Mizpah specialties, has moved to more commodious quarters and can now be found at 512 Arch street.

Smith, Kline & French Co., the most extensive wholesale druggists in Philadelphia, severed their connection from the trust several months ago.

R. J. Allen, Son & Co., 1124 Market street, Philadelphia, announce that for the present they have discontinued the sale of alcohol. This is welcome news to their pharmacal patrons, as the withdrawal of such a large house from the "trust" would indicate a break in the near future.

Wiley & Wallace appear to be phenomenally unlucky. Two years ago two persons were killed by the accidental explosion of flash light powder in their building at 123 North Seventh street. Three years previous to that there was a disastrous fire there, through which four people lost their lives. Now during Christmas week, just before they intended to move their location, four fires were discovered simultaneously in different parts of the building.

### Pennsylvania Pointers.

H. L. DeKalb, of Bustleton, has purchased the store adjoining Dr. H. A. Trego's residence in Newton.

Calvin Stahl has purchased the drug store of Edward McCoy at Mt. Jewett. Mr. Stahl was formerly employed by Mr. McCoy.

Dr. H. C. Wheeler, a very prominent doctor of Carbondale, is pursuing a post-graduate course in his favorite study, surgery.

Harry Stearns, who has been a student at the New York College of Pharmacy, was called home to Bradford recently by the death of his father, L. M. Stearns.

H. W. Zeamer has purchased P. S. Brugh's drug store in Columbia, Pa., and is brightening up the place and striving for a boom in business. Mr. Zeamer is a young and progressive man, and will undoubtedly achieve prominence and prosperity at the old stand.

Miss May Callendar, eldest daughter of W. B. Callendar, of the firm of Callendar & Cochran, druggists, at 85 Main street, Bradford, was married recently to Lieut. Oscar W. Koester, assistant engineer U. S. N. Among the guests were E. L. Beach, H. O. Stickney and W. H. McGrann, assistant engineers, and J. C. Reid, ensign of the U. S. N. Lieut. and Mrs. Koester will reside in Brooklyn, N. Y.

### Cincinnati Chemists.

Chas. Smith, of J. M. Long & Co., is laid up with quinsy.

C. F. Keena, of Newport, Ky., is up and about again after a severe spell of pleurisy.

Robt. Greenland & Bro., downtown pharmacy, have added a hot soda water fountain to their store.

E. G. Lilly, the East End pharmacist, after a two week's sickness of grip, is now able to be around again.

J. B. Adams, formerly of Lincoln County, Ky., has purchased the old stand of J. R. Youngblut at Newport.

Mr. V. M. Lamb, head clerk for W. J. Hall & Co., is seriously ill at Price's Hospital with pneumonia.

Hugh Stephan, the oldest druggist in Cincinnati and vicinity, had a cancer removed from the left side of his face by Dr. Conner.

J. R. Youngblut, formerly of Newport, Ky., is getting his samples ready for an extended trip in the South for Stine Vogler Drug Co.

G. M. Miller, a rising druggist of Newport, Ky., has purchased the O. Mayer & Co. store and has appointed his oldest son manager of the new store.

Cincinnati physicians will not be allowed to practice medicine until they have registered to the health officer, Dr. Prendergast. Must be graduates of college of medicine in good standing. This is done to prevent druggists from prescribing for small ailments.

### Michigan Mention.

A disastrous fire broke out Wednesday evening, Jan. 4, in the wholesale drug house of T. H. Hinchman & Son, Detroit, Mich., and in less than an hour the building and contents were entirely destroyed. The firm carried a stock valued at \$120,000, which was insured for \$80,000. Mr. Hinchman, Sr., was in New York at the time. The firm have established temporary headquarters at 81 East Larned street, and will endeavor to fill all orders. Offers were received from friends in other cities to fill orders, some of which were accepted. The firm has been in existence since 1819, and did a business amounting to \$750,000 a year. It was a fierce but beautiful fire, the various drugs producing brilliant colored effects. Surrounding property was badly damaged and the total loss will reach \$217,000.

The St. Carrier Pharmacy Co. was recently incorporated at Bay City for \$5,000.

Rubbish in the basement of Brown's pharmacy, Detroit, caught fire last week. The store narrowly escaped destruction.

H. Zimmer's drug store at Manistee was closed recently under a chattel mortgage held by A. H. Lyman. Other mortgages were filed to Mrs. Zimmer and Mr. Schreiner.

The Hazelton & Perkins Drug Co., of Grand Rapids, gave their traveling men a day off on New Year's and a banquet at the Morton House. The evening was spent at the theater.

Frederick W. R. Perry, of Detroit, was last week appointed a member of the State board of pharmacy in place of Alderman James Vernor, who declined to serve on the board any longer.

S. E. Youngs, druggist at Lakeview, has filed two chattel mortgages aggregating \$700. The first for \$200 in favor of John Ketcham, Edmore, Mich., and the other for \$500 in favor of Farrand, Williams & Clark, of Detroit.

John J. Fahry and Anthony Drach, business partners in a drug business at Benton Harbor, Mich., have been on unpleasant terms which culminated in a quarrel last week. Pistols were drawn and arrests followed. The store has been taken in charge by Morrison & Plummer Co., Chicago wholesale druggists, and the business will probably be closed up.

Bell's drug store, of Lexington, has been robbed of nearly \$500.

The Detroit Corkscrew Co., which was closed out December 22 under a chattel mortgage, filed a report with the county clerk last week. The authorized capital stock was \$40,000, with \$25,000 paid in. The debts of the concern were \$11,670.99 and credits \$880.84. The company had no real or personal property.

### Richmond Notes.

Polk Miller has got a coat that he wouldn't take \$50 for, and yet the garment wouldn't bring 50 cents at any pawn-shop in the United States. He gave \$4 for his priceless treasure. Like the garment worn in ancient times by Joseph, it is "a coat of many colors," but unlike the apparel of the Biblical character, it is by no means a thing of beauty. The coat is nothing more or less than the cast-off garment of an old-time Virginia dandy. It has been patched until it looks like a crazy-quilt, and there isn't a man in the country who could find the original cloth in it. Mr. Miller bought the coat to use when he appears before the public in his burnt-cork specialties, and the very appearance of the thing is suggestive of a "nigger." When the jovial druggist procured the treasure he was perfectly delighted, and he exhibited the garment with as much pride as if it had been the uniform of a Napoleon or Washington.

Leonard Marston and a party of others went deer hunting during the holidays, killing two fine deer while out.

A. W. Nalting, Jr., R. E. Shine, W. M. Williams and Phil. M. Slaughter were some of the collectors appointed to collect funds for the poor of the city by a charitable society.

Blanks & Smithers have very generally made it known to the philanthropist, Dr. W. W. Parker, that they will supply medicines at cost to those in indigent circumstances, who feel a delicacy in going to the free dispensaries, of which there are several here.

Dr. Parker, in whose praise too much cannot be said, has instituted a system for supplying clothing to the poor which well deserves imitation. Several wagons are sent about the city collecting cast-off clothing, which is in turn distributed to the deserving poor.

### Southern Siftings.

Dr. A. L. Scott, the well known pharmacist, after being with H. L. Fentress' drug house, Wilmington, N. C., for twelve years, has severed his connection with it, but will remain in the city.

Owings & Brice of Columbia, S. C., have moved the drug business from the store they have occupied heretofore to the one occupied by J. H. Mancke. Mr. Mancke has moved to the building where Geo. W. Parker & Co. have been carrying on their business, and Mr. Parker will hereafter do business at the office formerly occupied by George K. Wright.

As his broken-hearted wife bent over to kiss Frank Billingslea, a maniac in the Weston, Va., insane asylum, recently, the madman cut her throat with a razor. Then he turned on a keeper, and before he was overpowered had cut his own throat from ear to ear. Billingslea is a druggist, and formerly resided in Marion County, Pa. Hospital physicians have despaired of Mrs. Billingslea's life.

### New Jersey News.

J. H. Laubenheimer's Montclair Pharmacy at Montclair, N. J., has been sold to Frank Garrison, of Brooklyn N. Y.

Otto Raubenheimer, one of the Roll of Honor men, Class '88 N. Y. C. P., for the past six years with H. Klusmann, has entered into partnership with Max Wenzel, Willow avenue and Fourth street, Hoboken, N. J. The firm makes a specialty of sterilized and peptonized milk, the milk being furnished by their own herds of cattle. Mr. Wenzel owning a large and fine herd of Jerseys, and Mr. Raubenheimer a very fine and valuable herd of Holstein-Friesians, all thoroughbred, registered and pedigreed. Mr. Wenzel will devote his time entirely to the milk business, especially the sterilization of the milk at Glenview Farm, while Mr. Raubenheimer will manage the drug and milk business in Hoboken.

### New York Notes.

J. E. Williams and C. F. Hansen, formerly of New York City, have bought out the East New York Drug Co., at Atlantic and New Jersey avenues, Brooklyn.

The chemical company of Le Roy has elected the following officers: President, Fred. L. Steuber; vice-president, Fred Taft; recording secretary, Fred G. Atchison; financial secretary, Dean R. Paul; treasurer, Frank Ball; foreman, Lewis Steuber; first assistant, Fred. Taft; second assistant, John Muller.

The drug store at 1 Elizabeth street, New York City occupied by A. Fried, caught fire recently, and was damaged to the extent of about \$700. The proprietor was in the rear of the store when there was a slight concussion near the window and a flash of flame lit up the room. The cause of the explosion is unknown. The dress of a woman standing near the door caught fire, but was extinguished by boys in the neighborhood. The property was insured.

### Telephone War in Milwaukee.

A telephone war is on in Milwaukee, Wis. The trouble originated about three months ago when, according to one of the druggists, Adolph Spiegel, the company began to annoy him by raising his rental to the limit, refusing to make connections for doctors and customers who attempted to use his telephone and insisting that he put in a public pay telephone. Mr. Spiegel agreed to put in a public pay station if the other downtown druggists would, and then a meeting was called at which it was decided not to accept the company's proposition because it did not contain an offer to pay the druggists rent for use of their stores for the public telephone and yet required them to pay 10 cents for every call originating in their stores.

The next development was a letter from the company to the druggists who had united, and it named them as follows: D. R. Jones, Ladd & Janssen, Wright Bros., Dadd, H. O. Frank, A. Spiegel & Co. and the Hunter Drug Company. Each of these firms received a copy of the letter and it informed them that on account of burdensome deadhead business the company would have to very strictly confine the use of their telephones to the members of the firms and their employees. The druggists then found that doctors and customers were promptly met with refusal when they made attempts to use the telephones, and H. O. Frank, who has

been conducting the correspondence for the druggists, wrote a note to the druggists urging vigorous united action against the restrictions of the company.

Meetings, letters and conferences followed, but the company steadily insisted on putting in pay stations without paying rent for them, while the druggists insisted on rent for the use of a portion of their stores as a telephone department. Meanwhile the annoyances to the druggists have continued, and one of them has even been cut off for his persistence. Another told Mr. Frank that the company had told him it would double his rental if he did not put in a public telephone.

### Pharmacy Laws Violated in Washington.

A correspondent writes as follows to the Washington, D. C., *Star*:

"If there is one thing that ought to be looked into, it certainly is the law 'to regulate the practice of pharmacy in the District of Columbia,' which is daily being violated by some of our well-known druggists.

"It is a crime for a man to stand behind a counter and dispense something which he knows very little, if anything, about; for should he have the technical knowledge to fill such a position, he could appear before the board and register.

"The lives of the public are in the hands of a pharmacist many times in a day, and the slightest error may mean instant death.

"If there ever was a wrong committed, it is in allowing some mere boy to prepare a prescription so that the druggist may add a large amount to his bank account, and never for once think of the lives he is endangering by allowing an unskilled clerk to put up a prescription.

"It is the duty of the board of pharmacy to prosecute all offenders, and they should do so regardless of feeling and friendship. Let the registered clerks form an association and prosecute all offenders, as the pharmacy board fails to do so, and raise ourselves to the confidence of the public.

"By so doing we will have less unqualified clerks and can hold ourselves above the level we have traveled upon for so long a time."

Salumin, Gallal and Tannal are the names given to aluminium salicylate, aluminium gallate and aluminium tannate respectively. They are recommended as astringents for use in the nasal cavity. "Salumin" is insoluble in water and alcohol but soluble in alkalis. It forms a neutral double salt with ammonia which is very soluble in water and glycerin and is permanent in solution, though for some as yet unexplained reason is unstable in the dry form, losing ammonia and being converted into an insoluble form. The solution of the freshly made double salt in water or glycerin is termed "saluminium soluble." It is said to be especially valuable as a topical application in dry inflammatory affections of the nose or throat. Tannal is also insoluble and is even insoluble in ammonia. A soluble form is made by combination with tartaric acid. Gallal is also insoluble but forms a permanent, soluble combination ammonium.—*Monatschrift für Ohrenheilkunde*.

Bread Made with Soap.—From a communication read to the Association of Belgium Chemists lately, it seems that Continental bakers are in the habit of



mixing soap with their dough to make their bread and pastry nice and light. The quantity of soap used varies greatly. In fancy articles, like waffles and fritters, it is much larger than in bread. The soap is dissolved in a little water; to this is added some oil, and the mixture, after being well whipped, is added to the flour. The crumb of the bread manufactured by this process is said to be lighter and more spongy than that made in the ordinary way.

### The Sale of Poisons in Michigan.

In an open letter on the sale of poisons to the editor of the *Bulletin of Pharmacy*, J. B. Nagelvoort says: "The condition of affairs prevailing in Michigan, with respect to the sale of poisons, is humiliating to the profession of pharmacy, and a positive injury to the individual interests of the druggist. Not a week passes by without bringing its quota of one or more reports in the lay press announcing that some one has committed suicide, murder, or an attempt at either, with a substance purchased at a drug store.

"In nine cases out of ten the public hears nothing further, and seldom are the guilty parties brought to justice. The untrammelled sale of poisons, and the lukewarm interest accorded to toxicological questions, reflect discredit on the pharmaceutical profession. The public does not take kindly to the fact that the seller of the poison might have prevented the murder, the suicide, or the attempt at either, had he considered the general interest of the community as paramount to the temporary gain.

"I have counted about a dozen toxicological cases in one month (August-September, 1893) involving the purchase of a poison; and not one received the scrutiny the public has a right to expect from the better informed class to whom is intrusted this dangerous traffic. The careless indifference with which these cases are regarded is a disgrace to any civilized country.

"These facts have been submitted by the writer to the State Board of Health (Sept. 8, 1893), and an answer was received from the secretary inviting further correspondence upon the subject.

"I beg to offer you an excerpt: All poisonous substances to be kept apart from other medicines; no poisons to be sold save on a written requisition, and only to persons known to the druggist personally; all sales to be recorded; such a record to be held open for police inspection; powerful poisons not to be sold at all below a certain quantity.

"The same proposition, set forth at greater length, will be forwarded to the Michigan Pharmaceutical Association in the hope that some good will result from an open discussion—moral, judicial, and professional—in order that the entire project may not be shattered by a technicality, as in the case of the Wisconsin poison law, which was recently 'killed.'"

William Matthews, of Matthews Bros., Scranton, Pa., died recently at the age of fifty-nine. Mr. Matthews was a man of much energy and with large and varied business interests.

Edward C. Pfingst died at his home in Louisville, Ky., last month at the age of fifty-six. Mr. Pfingst was a native of Germany but removed to Louisville with his parents when he was but five years. He was an apprentice to Emil Scheffer and many years ago established his own store at Third and Breckenridge streets, where he died. Mr. Pfingst was one of the founders of the Louisville College of Pharmacy and was its president for several years. He was universally popular, being a man of refinement and marked gentleness of manner.

E. Beach, of McCook Junction, Nebraska died recently from lung fever. Mr. Beach was for several years actively engaged in the drug business at Valparaiso, was a Mason and was highly respected by the community.

E. R. Wilson, for many years a well known druggist of Grand Rapids, Mich., died recently aged sixty-three years. He moved to Grand Rapids in 1857 and was engaged in business until two years ago. One daughter, Mrs. Carrie Fairman, survives him.

Dr. Chas. M. Cresson, noted for his knowledge both practical and theoretical concerning the chemistry of the manufacture of gas, died not long since at his home in Philadelphia.

Dr. W. A. Hickman, a prominent physician and druggist of Springfield, Ill., died quite recently at the age of seventy-seven.

Clement Kelty, druggist, of Salem, whose serious injury by a fall on the night of November 7 has already been noted in these columns, died on January 3, at the Medico-Chirurgical Hospital, Philadelphia. Mr. Kelty served his apprenticeship with the late Joseph Bassett, graduated from the Philadelphia College of Pharmacy and about six years ago embarked in the business at the head of Market street, Salem. He leaves a wife and two daughters. The business will be continued under the charge of J. K. Lippen for the estate.

Dr. M. J. Paulding, of Daretown, N. J., met with a fatal accident on Tuesday, December 26. The doctor had been visiting patients in Woodstown. When about to return home, in crossing the tracks of the West Jersey railroad, his carriage was struck by an express train, killing his horse and injuring the doctor so that he died in a few hours. Dr. Paulding enjoyed an extensive practice and was widely known in South Jersey. He was graduated from the University of Pennsylvania in 1865. Besides being a busy physician, he was a lover of agriculture and its kindred pursuit, stock raising, owning one of the finest stock farms in New Jersey.

### Boards and Colleges.

The Brooklyn College had a pharmaceutical meeting on Tuesday afternoon at the college on Classon avenue. Dr. Jelleffe read a paper on a botanical subject which was the principal paper of the meeting. These gatherings are becoming more and more attractive and the attendance is gradually increasing. All pharmacists and others interested in pharmaceutical topics are cordially invited to attend. The next meeting will be held

at 3.30 P.M. on Tuesday, February 18, at the college buildings, 899 Classon avenue.

THE MASSACHUSETTS BOARD of Registration in Pharmacy held its first '94 examination on the 2d, 8d and 4th of January. The new pharmacopoeia was undoubtedly responsible for the non-success of 87 of the 42 candidates examined. Certificates were granted to Alfred F. Vaillancourt of Woonsocket, R. I.; Laurence E. Pedrick of Cambridge; Maurice E. Colter of Lawrence; Charles H. Webster of Newburyport; D. Frank Buckley of South Groveland. Reference is made to prosecutions by the board in our Boston letter.

THE DEUTSCH-AMERICANISCHE APOTHEKER VEREIN of this city at the meeting last week elected the following officers for the ensuing year: President, Victor Kostka; vice-presidents, Dr. H. Schmelz and C. Keyler; recording secretary, A. Wortman; corresponding secretary, Sidney Faber; treasurer, Theo. Louis; librarian, G. Holzenburg; "archivar," C. Schleussner; trustees, G. Ramsperger, C. Sherr and O. Lenz. As usual the meeting was enlivened by songs, recitations, etc., by some of the members.

ONTARIO COLLEGE OF PHARMACY.—Following are the results of the 46th semi-annual examination of the Ontario College of Pharmacy held during the last month: Passed in order of merit—Walter B. Scott, Port Hope; C. A. Buchanan, Kemptville; Geo. C. Park, Chatham; Thos Rowland, Toronto; W. H. Rutledge, Creemore; Rolph T. Shepherd, Stayner. Passed in subjects now and on previous occasions—Dugald Campbell, Atwood; Harry W. Love, Toronto; Alex. Ray, Belleville; Colin McIntyre, St. Thomas; Arthur L. Hopkins, Toronto; H. F. Gordon, Woodstock. Candidate who succeeded in taking four subjects—John Srigley, Toronto. Candidates who succeeded in taking one subject now and four on previous occasions—Leon Albert Goodacre, London; James M. A. Waugh, Wallaceburg.

THE INTERNATIONAL MEDICAL CONGRESS.—The chairman of the American National Committee of the Eleventh International Medical Congress has received a communication from the secretary-general stating that titles of papers to be read should be announced on or before January 31, 1894, to the secretary-general, Prof. E. Maragliano, Ospedale Pammatone, Genova, Italy. The programme to be distributed will contain the titles of all the papers announced before August 31, 1893, and since. The reductions granted by the railway companies months ago will be available from March 1 to April 30, 1894. "Traveling documents" will be sent to the address of every subscriber on or before February 15, 1894; and that after that date congressists will have to apply to the chairman of the National Committee, Dr. A. Jacobi, 110 W. 34th street, New York City. Members' dues are five dollars (money order to Prof. L. Pagliani, Rome), guests' (wives and adult relations) two dollars, medical students no fees. All are entitled to traveling documents.

### American Chemical Society.

The American Chemical Society, embracing 700 agricultural and analytical chemists of this country, held its annual meeting on December 27 and 28, in Hopkins Hall, Baltimore, which had been lent for the occasion by the trustees of Johns Hopkins University. The meeting was attended by a number of chemists from

### OBITUARY.

Louis F. Hiltz, a pharmacist at the corner of Herkimer street and Hopkinson avenue, Brooklyn, was killed by the trolley cars recently. Mr. Hiltz was about twenty-six years old and was a graduate of the Class of '91 N. Y. C. P. and a member of the alumni association, which body passed suitable resolutions of regret. He was very popular and had been quite successful in business.

out of town and by many pharmacists and chemical students of Baltimore.

The morning session was called to order by the president of the association. Dr. H. W. Wiley, of the United States Department of Agriculture. Addresses of welcome were made by President Gilman and Prof. Ira Remsen of Johns Hopkins University. Dr. Wiley replied and then delivered his annual address on "The Relations of Agricultural Chemistry to the Waste and Recovery of Plant Food." The three hours following were devoted to the reading and discussion of papers on the following subjects:

"The Widespread Occurrence of Barium and Strontium in Silicate Rocks," read by W. F. Hillebrand, of the United States Geological Survey.

"The Estimate of Small Amounts of Barium and Strontium in Silicate Analysis," W. F. Hillebrand.

"A Plea for Greater Completeness in Chemical Rock Analysis," W. F. Hillebrand.

"A Study of the Distribution of the Oleo-Resins in the Pinus Palustris," Oma Carr, of the United States Department of Agriculture.

"Salicylic Acid in Food," K. P. McElroy, of the Department of Agriculture.

"Utilization of Garbage," Bruno Terne, of Philadelphia.

In the afternoon the visitors were conducted by Dr. W. J. Gascoyne through the works of the Baltimore Copper Smelting & Rolling Company.

The following were among the members of the society present at the meeting:

Prof. P. Fiman, of Columbian University, Washington; Walter B. Randall, Washington; Prof. Charles L. Parsons, of the New Hampshire Agricultural College; Charles B. Dudley, Altoona, Pa.; E. W. Allen and W. D. Bigelow, Washington; Edward Hart, Easton, Pa.; H. B. McDonnell, Maryland Agricultural College; G. M. Chalmot, Virginia Department of Agriculture; Prof. W. R. Orndorff, Cornell University; Prof. R. M. Parks, Jr., Bedford, Ind.; Samuel P. Sadler, Philadelphia, and Prof. George F. Barker, University of Pennsylvania.

The society held a banquet on the night of December 27th at the Eutaw House. Dr. Wm. Simon presided. There were no formal toasts, but short speeches were made by Prof. H. W. Wiley, Prof. J. H. Appleton, Prof. F. W. Clarke, Prof. Wm. McMurtrie, Prof. Ira Remsen and others. The committee having charge of the arrangements for the banquet were Wm. Keyser, Jesse Tyson, B. N. Baker, R. W. L. Rasin, Wm. Glenn, C. P. Van Gundy, W. J. Gascoyne, G. W. Lehmann, Dr. D. C. Gilman, L. F. Detrick, G. W. Grafflin, Wm. Simon, W. B. D. Penniman, R. Dorsey Coale, Charles Glaser, Alfred Dohme and G. A. Liebig.

### Novel Prescription Label.

A. L. Lengfeld has adopted a method whereby each prescription dispensed in his store can be traced back to the dispenser. The front of the label is like an ordinary prescription label, but on the back is printed the following:

DISPENSED BY	CHECKED BY
<i>This prescription is filled exactly as requested by the physician. To insure absolute accuracy, every prescription prepared by one pharmacist is carefully checked by another before being dispensed.</i>	
DATE.....	

This can be read when the label has been pasted on a bottle, or, if on an ointment jar, it can be first soaked off and then ex-

amined. This arrangement is a check upon carelessness on the part of the pharmacist. The additional check of having a second person to revise the work reduces the chances of error to a minimum.—*Pacific Druggist.*

### Twenty Years Work.

This week "Preston of New Hampshire" calls attention to the "Rivermouth Sachettes." Twenty years is a long time, but it took 20 years' study to perfect the formulas. They are perfected too, at least he thinks so. If you would like to see what that means write Preston, Portsmouth, N. H., for free samples, mentioning this paper.

### Mineral Water Granules.

The growing appreciation of the public for condensations of all kinds opens a splendid field for A. G. Armstrong Co.'s effervescent granules of mineral water salts. Their effervescent lithia granules are particularly good sellers, as the ordinary bottled lithia water frequently has no lithia in it, save in the name. For full details as to packages, free samples, etc., write A. G. Armstrong Co., Boston, Mass., mentioning this journal.

### A New Prescription Balance.

Below is an illustration of the latest Torsion Balance Prescription Scale put upon the market. The scale is sensitive



NEW TORSION PRESCRIPTION BALANCE.

to  $\frac{1}{10}$  of a grain, and unlike other kinds is guaranteed to remain so. The pans are of German silver, and a load of eight ounces on each side would not injure the scale, thus showing the strength, durability and accuracy of the scale. The price of this remarkable scale is placed at \$15.00 for the present, and no druggist needs to be without a Torsion Balance hereafter, as this low price places it within the reach of all.

The triple beam which the same company (The Springer Torsion Balance Co., 92 Reade street, New York) recently put upon the market is growing more in favor every day, as it does away with the necessity of purchasing metric weights, and gives the equivalents in the three systems at a glance.

One of their latest illustrated catalogues will be sent free of charge upon application to them, mentioning this paper, as well as a copy of The Philadelphia Franklin Institute's report giving its reasons why Torsion Balances are better than any knife edged scales that could be made.

### Through Cars to New Orleans.

Among the many important improvements in the Baltimore & Ohio Railroad train service is the addition of through

Pullman sleeping cars from New York to New Orleans, via Philadelphia, Baltimore, Washington, and the famous Shenandoah Valley route, passing through Roanoke, Knoxville, Chattanooga and Birmingham. The train leaves New York daily at 5 P. M.; Philadelphia, 12th and Market Sts., 7.22 P. M., and 24th and Chestnut Sts. 7.38 P. M., reaching Roanoke at 7.50 A. M.; Knoxville, 3.52 P. M., and New Orleans 12.45 P. M.

This train is very handsomely appointed being vestibuled throughout, and has dining car service New York to Chattanooga. At Washington a Pullman sleeping car which runs through to Memphis is added to the train.

### Review of the Wholesale Market.

NEW YORK, January 10, 1893.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The general market is looked upon by importers and jobbers as in good shape and a hopeful and confident feeling appears quite general among those interested in the several departments, the belief being entertained that with the advance of the season liberal stock additions will be found necessary. The quotations of the market appear to rest upon a steady to firm basis, and holders maintain values with a good show of firmness, few changes to a lower basis occurring.

### DRUGS.

CASCARA SAGRADA continues in fair jobbing request with transactions reported at 6c.

CACAO BUTTER.—A sale of 4,000 lbs., foreign, is reported at 32c. net.

CIVET is held a trifle higher with \$2.50 now quoted for Aden.

ERGOT, SPANISH, 5,000 lbs. for shipment are reported from Hamburg, the price to be about the equivalent of 25c. laid down.

GRAINS OF PARADISE are dull with 6 $\frac{1}{4}$ c. now quoted as acceptable.

MENTHOL, JAPANESE, is maintained at \$5.50 @ \$6. The small available stock keeps the trade volume within rather narrow limits.

MUSK skins are easier, with holders quoting now \$1.75.

OPIUM.—The market on Wednesday was dull and uninteresting, but toward the close some inquiries came to hand, and on Thursday a good deal of strength was developed under the increasing demand, and up to \$2.25 was paid. This stiffness in the market, however, proved only fugitive, the interest dying out and the demand falling off. Late in the week cables were received of a decline in Smyrna of about three pence from the highest quotations reached. This had the effect of checking buying, and at this writing the market is dull and lifeless with \$2.25 quoted for cases and \$2.25 @ \$2.27 asked for jobbing lots. Powdered is quiet at \$2.90 @ \$3.

QUININE is in good jobbing demand, showing the influence of the prevalence of influenza on the consumptive demand. Manufacturers maintain their quotations firmly at 23 $\frac{1}{2}$ c. for foreign bulk, though second hands will part with portions of their holdings at 22c. Domestic in large bulk is firmly held at 25c. by manufacturers.

SAFFRON, Mexican, is maintained at the full recent advance, the quotation being 40 @ 42c., and sales to a moderate extent are reported at these figures.

SAGE, Italian, 10 bales select sold at 6½c. and 15 bales ordinary at 5c. SENNA, TINNIVELY and Alexandria, is considerably inquired for with numerous small sales.

SOAP BARK is reported firm in the London markets the position of the article here being unchanged.

TONKA BEANS, Para, have declined and are offering in the market from second hands at 35 @ 45c.

#### DYESTUFFS.

CUTCH receives very little attention the demand being limited with 4¼ @ 5c. wanted for SM or HT from store and 4½c. to discharge.

GAMBIER is quiet, holders not being willing to urge sales at a concession as they regard the statistical position as strongly favoring their interests. In a jobbing way 4 @ 4½c. is asked and from \$3.90 @ \$3.95 ex wharf.

INDIGO, Nutgalls, and other staples unchanged.

SUMAC, Sicily, is in moderate request with sales at \$75 @ \$77.50.

#### CHEMICALS.

ACETATE OF LIME, brown, has been reduced to 95c. @ \$1 for 100 lbs.

BLEACHING POWDER, English, is in very limited supply and held at the full value of 2½ @ 2¾c.

BRIMSTONE CRUDE is very scarce upon spot, the value momentarily being nominal. The shipment price is \$17.75 @ \$18 for best seconds.

CARBOLIC Acid has declined with the quotations of the market somewhat unsettled.

CALOMEL is quoted 68 @ 69c.

CHLORATE OF POTASH is firmer, though not quotably higher. The outside stock is reported to be diminishing though there seems sufficient to meet the necessities of the trade. Sales of German at 14¼c. and English at 14¾c. are reported.

CITRIC ACID has declined, domestic makers quoting 43¾c. for barrels and 44c. kegs.

COCAINE MURIATE shows a hardening tendency, advices from abroad indicating the possibility of an advance.

CREAM TARTAR is firmer, owing to the suspension of one of the leading manufacturers. Crystals are not offered openly at less than 18c., and powdered at 18¾c.

NITRATE OF SILVER.—The price has been reduced to 45¼ @ 47c. as to quantity, the inside for lots of 1,000 ozs.

NITRATE OF SODA is without important change and continues held at \$1.80 @ \$1.90.

OXALIC ACID is without important change and may yet be obtained in instances at 6¼c., though some in the trade decline to shade 6¼ @ 7c.

QUICKSILVER is without important change with the quotation nominally 44 @ 46c. as to quantity.

SAL SODA is dull and without important change.

#### ESSENTIAL OILS.

ALMOND, Allen's, has declined to 37 @ 39¾c.

ANISE, Cassia and Clove are without new or interesting feature.

BERGAMOT has been reduced to \$2.40. CURB offers with considerable freedom, \$1.70 being quoted as acceptable.

ERICKSON at slightly easier prices, being about \$1.20.

LEMON GRASS is firmer with 85c. now asked.

PEPPERMINT is without important change. PANSY has strengthened to \$2.75.

YLANG YLANG, Chirls, is now obtainable at \$75.

#### GUMS.

ASAFETIDA is firm and quite freely inquired for, but business is in a measure restricted by the scarcity of really desirable grades.

BENZOIN is held with increased firmness, 32¼ @ 80c. being quoted as to quality.

CHICLE has declined, and holders refuse to shade 29c.

SENEGAL, Arabic, tragacanth and other staples are without new or interesting features.

SHELLAC continues quiet, the sales being confined to small and unimportant quantities. Calcutta reflects a firm condition with very few offers made for shipment.

#### ROOTS.

GINSENG continues in demand with the current sales within the range of \$2.20 @ \$3.50 as to quality.

GOLDEN SEAL appears in strong hands and is held at 22½ @ 23c.

IPECAC is held firmly at the range of \$1.25 @ \$1.40 and small sales are reported.

JALAP is quiet but steady.

LICORICE, Spanish. We are reported sales of 20,000 lbs. @ 3¼c.

SARSAPARILLA, Mexican, is in better supply. Last sales from first hands were at 9 @ 9½c. and from jobbers 10¼ @ 11c.

SENGA remains quiet, being without important change.

#### SEEDS.

ANISE, Russian.—A sale is reported of 20 bags at 5¼c. The general asking price is 6c.

CANARY is firm and jobbing fairly at 2½c. for Smyrna.

HEMP, Russian, is held at 2½ @ 2¾c., though no important action in the article is observed.

QUINCE, German, is very scarce in the market. Holders are now quoting 45 @ 50c.

RAPE is quiet with a limited trade.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

PHYSICIAN wanted who has done detail work among physicians, for manufacturing chemists or wholesale drug houses, to take similar position with an importing drug house. Also physician to occupy position in office to attend to correspondence with physicians; state experience, reference, etc. Lock Box 2178, New York City.—2.

WANTED.—Novelties and specialties of any kind that can be sold by druggists. We have men traveling in Southern and Southwestern States all the time, and we buy anything we can sell; this is a good opportunity to introduce your goods. Send price lists and full particulars to "Snap," care AMERICAN DRUGGIST, 37 College place, New York.—2.

#### POSITIONS WANTED.

SALESMAN wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

GERMAN DRUG CLERK, graduate, desires steady situation; 14 years' experience; registered in four States; 27 years old; single. Address "Graduate," 384 Lake street, Cleveland, Ohio.

A SENIOR STUDENT at the N. Y. C. P. desires a position in a good drug store for each evening after 7 o'clock; small compensation expected; can give best of references. Address E. K. Loveland, 303 West 51st street, city.

WANTED, responsible position by reliable pharmacist of 10 years' experience; references given; or an agency for something that can be worked one afternoon a week. Address Pharmacist, 1345 Corcoran street, Northwest, Washington, D. C.

RELIEF CLERK.—Young man desires position as relief clerk, registered, German and English, for Saturday, Sunday or Monday; highest testimonials. Address "Physostigma," care this office.

DRUG CLERK, New York State licentiate, twenty years' experience city and country; temperate, competent, good business qualifications and good habits, desires permanent position; low salary; country preferred. Address, for ten days, "Pharmacist," Box 307, Bath, Steuben Co., N. Y.—26.

SITUATION WANTED by a graduate of Ontario College of Pharmacy and Bachelor of Pharmacy; wholesale and retail experience; best of references. Address W. Turner, Chatham, Ontario.

SITUATION WANTED as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

JUNIOR DRUG CLERK.—A graduate N. Y. C. P., 18 months' experience, wishes a situation; will sleep in store; wages moderate; best reference. Address Lester Carde, 374 12th street, Brooklyn.

#### BUSINESS OPPORTUNITIES.

DRUG STORE for rent, recently vacated by a successful druggist who has been there for five years; long lease, low rent. Brick building, 25 feet plate glass front. Address "Fine Chance," this office.

FOR SALE.—Only drug store in town of 1,000 in Western Pennsylvania; stock clean and salable; established 25 years; good reasons for sale; easy terms. Address Wm. F. Moore, Box 79, Homer City, Pa.

FOR SALE.—Drugs, stock and fixtures; only two years in use; first-class condition; situated in part of city with 4,000 inhabitants immediately surrounding; will invoice \$1,500; doing net business annually of over \$2,000. Would be pleased to correspond with some one meaning business. Address "Phenacetin," care PHARMACEUTICAL RECORD.

WANTED MONEY to help establish a pharmacy; have a little cash; 10 years' experience; good record; age 25; German American, and will hustle; would buy on easy terms. Address Charles Wilhelm, 133 Chenango street, Buffalo, N. Y.

FOR SALE.—In Central New York, the leading drug store in a live, growing town of 4,000 inhabitants; large country trade; no cutting of prices; only two drug stores in town; located on central corner; good reasons given for retiring. Address "Eugene," at this office.

FOR SALE.—Old established drug store, in Pennington, N. J.; live stand; no other drug store nearer than five miles; stock, drugs and stationery; semi-annual town; opportunity for a cash buyer; owner studying medicine. Geo. W. Scarborough, Jr., Pennington, N. J.—2.

DRUG STORE WANTED.—Brooklyn: \$3,000 to \$4,000 cash; won't pay a fancy price; quote your lowest figure. "Cash Buyer," 37 College place, New York.

DRUG STORE FOR SALE.—One of the nicest and best equipped drug stores in central Pennsylvania; best location in town; between depot and post office (one minute walk from either); 6,000 inhabitants, with good surrounding country; three other stores in town; store 30 by 18, laboratory 16 by 16; cheap rent; established 10 years and well advertised; several good paying *proprietary articles*; no cutting; full price for everything. The amount I have paid for goods bought from Jan. 1 to Dec. 30, 1893, are as following:

Shoemaker & Busch (for drugs).....	\$2,441.48
Allen (for alcohol).....	639.89
Sears.....	403.89
Miscellaneous (perfume, soap, brushes, sponges, etc.).....	1,308.76
Total.....	\$4,793.02

Will inventory over \$3,000, not including \$225 National cash register, six months in use; will sell all and good will for \$3,500; good soda trade; both gas and electric light; fans and watermotor; reason for selling, am going in hotel business in same town and just one block from drug store. H. W. Leister, Huntingdon, Pa.—2.

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

### Animal and Vegetable Oils.

# American Druggist and Pharmaceutical Record.

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A. R. ELLIOTT, President.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

## THE LEAGUE MEETING.

AN adjourned meeting of the New York City branch of the Interstate Retail Druggists' League will be held this (Thursday) evening at 194 Third avenue.

It is the imperative duty of every retail druggist in this city and vicinity to give this organization the most hearty and thorough support. It is a duty which the druggist owes in the first place to himself and in the second to his fellow druggists.

If your business is unremunerative it is at least within the bounds of probability that by concerted action it may again be made to pay. If it is already prospering the Interstate League may be able to make it even more profitable.

The effort asked is small, the contribution a trifle, particularly when it is compared with the end to be attained.

If you cannot attend the meeting you can at least aid by your sympathy and your suggestions. Our call for suggestions last week brought forth at least one which deserves prominence. It is outlined by J. W. WEEKS in another column and should have the earnest consideration of every serious minded pharmacist.

President Canning writes us as follows:  
Editor AMERICAN DRUGGIST:

I trust that the New York City branch of the Interstate League is fully alive to its responsibility in connection with the coming national convention on February

6. We have some magnificent local organizations in New England, and they stand ready to join with the brethren in the great city in putting the Detroit Plan into immediate operation.

Without the assistance of New York we cannot succeed in any national movement; it is our great market. Coincident with its taking hold in good earnest, however, an irresistible tide will set in from all quarters.

In your stirring editorial of last week you truly state that "The convention has been called here largely at the instance of the New York City branch of the league, and it behooves us to have a local delegation which is commensurate with the size and importance of this city."

The time is ripe for this movement; the general commercial depression should alone be sufficient stimulus to goad us on.

If the coming meeting is a success, then the future prosperity of the League is assured. If, on the other hand, the convention is a failure then indeed the cause may be lost beyond restoration. It remains with New York City to say what the result shall be. After much importuning from the New York branch, the president of the League called the convention, at the time and place by it suggested.

I trust that these words are needless. My earnest desire for a successful meeting is their excuse. I know that the local pride alone of the great metropolis will assert and prove itself equal to and beyond the occasion.

Cordially yours,

HENRY CANNING,  
President Interstate League.

Boston, January 14.

The druggists of the whole United States are looking to the pharmacists of this city for an example. Let the example set be such as not to put to shame the drug trade of the metropolis. Let there be strong, united action. Set an example of harmonious co-operation which will arouse the enthusiastic emulation of the trade from Maine to Mexico.

Come to the meeting. If you can't come, write.

## SOUTH CAROLINA LIQUOR LAW.

The law regulating the use, sale, transportation, etc., of alcoholic liquors within the State of South Carolina was amended on December 23 to declare the law and further regulate the provisions of the Act. Section 18, which relates to the sale of liquor by druggists, reads as follows:

Licensed druggists conducting drug stores and manufacturers of proprietary medicines are hereby authorized to pur-

chase of Dispensers of the counties of their residence intoxicating liquors (not including malt) for the purpose of compounding medicines, tinctures and extracts that cannot be used as a beverage. The Dispensers shall not charge such licensed druggists more than ten per cent net profit for liquors so sold. Such purchaser shall keep a record of the uses to which the same are devoted, giving the kind and quantity so used, and quarterly they shall make and file with the County Auditor and with the County Board of Control sworn reports, giving a full and true statement of the quantity and kinds of such liquors purchased and used, the uses to which the same have been devoted, and giving the name of the Dispenser from whom the same was purchased, and the dates and quantities so purchased, together with an invoice of each kind still in stock and kept for such compoundings. If said licensed druggist shall sell, barter, give away or exchange or in any manner dispose of said liquors for any purpose other than authorized by this section, he shall, upon conviction, forfeit his license and be liable to all penalties, prosecutions and proceedings at law and in equity provided against persons selling without permit, and upon such conviction the Clerk of the Court shall, within ten days after such judgment or order, transmit to the Board of Pharmaceutical Examiners the certified record thereof, upon receipt of which the said board shall strike the name of the said druggist from the list of pharmacists and revoke his certificate: Provided, That nothing herein contained shall be construed to authorize the manufacture or sale of any preparation or compound under any name, form or device which may be used as a beverage which is intoxicating in its character. And provided, further, That the State Commissioner shall be authorized to sell to manufacturing chemists and wholesale druggists alcohol by the barrel at cost.

While this amendment affords some amelioration of the condition of the druggist, there is one clause in it which, if literally interpreted, may prove a source of a great deal of trouble to perfectly innocent men. The clause referred to is that which provides that the statute shall not be "construed to authorize the manufacture or sale of any preparation or compound under any name, form or device, which may be used as a beverage which is intoxicating in its character."

In the case of A. Nattans, of Washington a similar clause seems to have worked a gross injustice. In that case, if the liquid dispensed was made according to the formula claimed, and so far as the evidence was reported, there was no conclusive proof to the contrary, it was a legitimate



and probably valuable tonic. It also happened to be intoxicating, but this is a property shared by the vast majority of tonics, and nevertheless the druggist was fined for selling it.

There are hundreds of preparations daily dispensed by the pharmacist, the sale of which, under a literal interpretation of the South Carolina and of the District of Columbia laws, would render the druggist liable to prosecution. The critical point is the manner in which the law is to be construed. An illiberal judiciary could, on this law, incarcerate every retail druggist in the State of South Carolina.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**White Chewing Gum.** M. S. M., Providence, R. I.—We explained some time ago that the basis of all modern gums is chicle; paraffine, or wheat gluten is worked in sometimes to overcome the gray color.

**Toothache Drops.** M. N. R., Charlestown, N. H., asks if formula No. 1 of December 7 is correct as to the first ingredient. It is readily seen that in eight fluid ounces, four fluid drachms of clove oil is but a fair quantity.

**Toothache Gum.** M. S. N., Providence, R. I.—In our issue of December 7th, we give a method for gelatinizing chloroform, which answers well.

Another and very old scheme quite effective, is to add creasote or carbolic acid to contrait collodion sufficient to form a stiff coagulum, this may be sent out in mass or cut into small pieces or rolled into pills.

**Morphine in Teething Syrup.** M. M., New York, desires to know whether teething syrups of the market contain opium, and how much.

We believe it to be the consensus of chemists from examinations made at different times during years, that something of that kind is put into nearly all, in some very much more than a trace.

**Banishing Ants, Moths, and Bedbugs.** B. A. W. Columbus, Miss.—The following practical hints, partly derived from others, partly tested by our own experience, may prove useful to our correspondent.

**Ants.**—These are usually very obstinate and persistent in maintaining a footing when they have once gained it. The best method to get rid of them is the following. Upon a small board, of convenient size to be quickly carried about, spread a thin layer of syrup, and put the board where the ants are apt to congregate. When as large a number as can be expected have gathered, the board is quickly carried away, and the ants destroyed. This is repeated as long as any considerable number make their appearance. When they are becoming less numerous, the syrup may be poisoned, so that the

ants may carry the poison to their nests. If the nests can be found, this may be rendered uninhabitable for them by insect powder.

**Bedbugs.**—A tincture prepared from best insect powder may be applied with advantage to all places where bedbugs have been found to locate themselves. Tincture of colocynth has also been used for this purpose. The most efficient remedy which we have found is a solution of bichloride of mercury in glycerin, about 1 in 50. This must be applied with care and judgment, being brushed as a thin layer into the cracks and recesses of the bedsteads, etc. It should not be used where there are children or other persons about who do not understand the nature of the substance. In barracks—such as our correspondent appears to allude to—it would be quite efficient and comparatively harmless.

**Moths.**—When moths have once permanently invaded a piece of furniture, furs or heavy woven fabrics, it is next to impossible to destroy their larvæ. But it is quite easy to protect untainted material from their inroads. This is best accomplished by packing the fabrics, if this is possible, into tight boxes, a layer of camphor or of naphthalin being put between each two layers of the fabric. The camphor may be used in pieces of about the size of a walnut, and wrapped in paper. The naphthalin is best reduced to a coarse powder, and placed between a couple of sheets of paper, as a thin layer.

**Borocitrate of Magnesium.**—W. B. T., Texas.—This compound was formerly in some demand, probably owing to the favorable reports made regarding its solvent power over calcareous deposits, and its comparative innocuousness. The salt, as well as the solution of the salt, may easily be made in the following manner:

### 1. Borocitrate of Magnesium.

Carbonate of magnesium.....	1 part
Citric acid.....	2 parts
Borate of sodium.....	2 "
Water.....	3 "

Dissolve the citric acid in the water at a boiling temperature, then add the carbonate of magnesium and afterward the borax. Filter and concentrate the solution by evaporation, and spread it upon plates of glass or porcelain, so that the salt, when dry, may be obtained in scales. Or evaporate the solution to dryness, and reduce the mass to powder. Keep it in well-stoppered bottles.

Both citric and boric acids being tri-basic, it would require, theoretically, 8 molecules of magnesia to saturate both acids. The actual quantity above directed, however, saturates only two-thirds of the acids, thus rendering the product agreeably acidulous.

### 2. Solution of Borocitrate of Magnesium.

Carbonate of magnesium .....	1,000 grains
Citric acid.....	2,000 "
Borate of sodium.....	2,000 "
Water, enough to make.....	52 fl. oz.

Dissolve the citric acid in 8 fluid ounces of water at a boiling temperature, then add the carbonate of magnesium and afterward the borax. Filter, and then add enough water to make the solution measure 52 fluid ounces.

The solution contains about 10 grains of the dry borocitrate in each fluid ounce.

**Clarifying Liquids** (several subscribers).—Fermented liquids are generally clarified by means of isinglass. The imported Russian isinglass is best, but the domestic article, known as American isinglass, which is simply the dried swimming-bladder or sound of the hake, may also be used. One ounce of this, cut fine, is soaked

in about a pint of the liquid, and when it is dissolved as far as possible mix with more to make about 1 gallon. About 2 pints of this are enough for clarifying a barrel. The two pints are poured into a pail, and enough of the liquid from the barrel is poured to fill the pail about two-thirds, the contents being energetically stirred with a sort of whisk to raise a frothy head. The whole is then mixed with the contents of the barrel, and in a few days clarification will have been effected.

## CORRESPONDENCE.

### Use of Permanganate in Testing Quinine for Morphine.

Editor AMERICAN DRUGGIST:

Referring to the note of Dr. Battle on page 10 of your issue of January 11th I wish to state that there is no error involved in the use of potassium permanganate in testing quinine for the presence of morphine. Potassium bichromate is, indeed, very generally employed for this purpose, but potassium permanganate is equally serviceable, and both of them may be replaced by various other inorganic substances readily yielding oxygen.

CHARLES RICE, New York City.

### A Last Word on Formulas.

Editor AMERICAN DRUGGIST:—

I regret exceedingly that Mr. E. E. Fischer has found fault with me for criticising his formula, and I readily admit it is a presumption on the part of one, who has but recently published an article in your paper which contained, what Mr. Fischer styles family receipts. However, the article written by me and the receipts therein contained have since then been reprinted in America, Europe and in Australia, which shows the correctness of Mr. Fischer's assertion, "that different people have different ideas."

I readily admit I have never been an expert in devising nor originating arcana, nor have I ever usurped the calling of the physician who I believe to be the proper person to devise the doses of toxic drugs to be given to sick humanity.

In apologizing to Mr. Fischer I will state that some time ago I experimented for a period of nearly six months with cod liver oil and have published a paper on this subject, still, as Mr. Fischer states, I may not be well read on the subject and as I am never too old to learn, I will try to do better in the future.

Likewise be it far from me to dispute the right of the druggist to invent any kind of cure-all or panacea and to name such with any name a bright intellect hits on. Our "*fin de seicle*" brings out so much new in what is called pharmacy, that "*nil admirare*" becomes law.

In thanking you, Mr. Editor, for publishing my answer, I readily compliment you for the facilities you offer in your columns for a controversy held strictly within professional bounds. If I had known that my criticism of Mr. Fischer's paper would be considered by him "as not in good form," coming from me, why I would simply not have criticised and would have escaped being called to order from high Olympus.

There I leave Mr. Fischer, who I never had the pleasure of meeting, and who no doubt can write much more competently on the subject than I can.

FRED LASCAR, Ph. G., F. A. S.  
NEW YORK CITY.

# News and Notes.

## THE INTERSTATE LEAGUE.

A meeting of the New York City branch of the League was held on last Thursday afternoon, at the hall at 194 Third avenue. An adjourned meeting to which all pharmacists are cordially invited will be held this (Thursday) evening at the same address at 9.30 P.M. The importance of this meeting is dwelt on editorially and is further emphasized by a strong and forcible letter from Mr. Canning; published in connection with that editorial. Every pharmacist of this city should attend or send in his name.

The interest in the matter is not confined to this city, as may be seen from the letters, etc., published below. We also republish from the issue of December 28th the original call for the convention.

## A Practical View of the Cut Rate Problem.

Charles A. Osmun, president of the local branch of the Interstate Druggists' League, has courteously handed us the following able and interesting communication addressed to him by J. W. Meeker, of Nyack on the Hudson:

DEAR SIR: In THE DRUGGIST AND RECORD of the 11th inst. in an article relating to the prospective meeting in New York City of the Interstate Retail Druggists' League occurs the following request: "If you have a plan that may help the organization let us hear from you, and hear from you now." I will not attempt to dignify what I may say in this connection by the name of "plan," or claim for myself originality for much that I may write on the subject, but rather offer a few suggestions to you personally for what they are worth. In the first place, then, permit me to say that I do not believe the Detroit contract plan alone will ever accomplish the object for which it was designed.

There is one missing link at least, and I believe if you can and do supply this link and secure its practical adoption, you will accomplish more for the good of yourself and fellow craftsmen than has resulted from all the plans and propositions submitted during the past ten years, and without which failure will surely come, just as certainly as effect will follow adequate cause.

I think all will admit that the philosophical, logical, common sense method of abolishing an evil of any kind is to remove, or still better annihilate the cause, and for the noble work I would commission you.

The evil to be removed, as I understand the subject, is the "scalping" or suicidal "cut-rate" principle and practice, and the cause of this evil is the vicious and unjust methods of the manufacturers.

In short I charge upon the manufacturers (so far as I know, with just two exceptions) the origin and maintenance of the cut-rate war, notwithstanding their professed (but really hypocritical) sympathy.

Just so long as manufacturers continue building and maintaining the genus scalper just so long will plans and agreements fail, the "Interstate R. D. League" to the contrary notwithstanding. Do you ask me how manufacturers have created the

scalper, and how they perpetuate his existence? I answer, by unjust discriminations in the price they fix on their products.

Do you ask the remedy? The answer is, persuade them to stop doing this evil, and learn to do good. This brings me to what I believe to be the missing link, which when secured and properly adjusted will make a perfect and enduring chain extending in its beneficence and mutual interest all the way from manufacturer to consumer.

Will it not pay the League to use its influence for the accomplishment of such a result?

If so, induce manufacturers to adopt the following plan, viz.:

(1) To sell his products to retailers at one uniform price, regardless of the quantity purchased at any one time, providing it be not less than one quarter dozen. For example if the article be rated at \$3 per doz. then  $\frac{1}{4}$  doz. \$2— $\frac{1}{2}$  doz. \$4—1 doz. \$8, 1 gross twelve times as much as one dozen, and so on without exception as far as enumeration extends.

(2) When sales are made to bona fide wholesale dealers such discounts may be given as may be agreed upon between the manufacturer and wholesale dealer, but to be a bona fide wholesale dealer implies the selling only at wholesale and not at all at retail. If sales are made at retail then such dealer is to be regarded as a retailer, and must pay the same prices as one who does not claim to sell at wholesale.

The logic of this proposition is self-evident and needs no argument to commend it to the good judgment of the practical pharmacist. It will be noticed that incidentally it would remove the evil of the wholesalers robbing their customer, the retailer, of his legitimate business, a thing which is now far too common. Restricting the discount to bona fide wholesalers must be insisted upon, otherwise all retailers would be likely to proclaim themselves wholesalers as well as retailers for the purpose of getting the discount, and thus defeat the whole scheme and leave us just where we are now.

If adopted and faithfully executed it would prevent the occurrence of another trouble—at least so alleged by manufacturers, that the "Scalper" obtains his supplies mostly through unscrupulous retailers—who for a small commission or from "pure cussedness" lend themselves to be used as tools by the scalper.

I would rather take my chances for business, with this plan alone, faithfully applied, than with the Detroit plan alone, but the two combined will prove, I believe, the antidote to most of the evils of the cut.

J. W. MEEKER.

NYACK-ON-THE-HUDSON.

## Convention of the League.

The following call for a meeting has been issued by the president of the Inter-State Druggists' League and should receive hearty response.

Boston, Mass., Dec. 26, 1893.

At the request of the New York City and other branches a special convention of the Inter-State Retail Druggists' League will be held on Tuesday, Feb. 6, 1894, at the Iona Room, Terrace Garden, 147 East 5th street, New York City, at 10 o'clock A.M., to devise measures for the advancement of the league and the cause for which it was instituted.

It is earnestly hoped that local organizations throughout the country which have not yet joined the league will do so at once, so that the united wisdom assembled may tend to ameliorate existing conditions of trade among the retail fraternity. It costs but one dollar per year for each individual enrolled, and the possible and even probable results of such a pooling of interests may bring returns a hundred fold. Lack of complete organization has been the one cause of failure in past movements. With such organization we can accomplish all we desire—without it, absolutely nothing.

Heretofore it has been a difficult problem to solve the question of controlling the large army of retailers within one organization. The Inter-State League, being an aggregation of local associations or branches, sending delegates (one to a hundred) to a central or national body, seems to solve the difficulty, and secures as perfect representation as though the local associations were assembled in full. Each delegation receives its instructions from its home association. Each local organization can to a certain extent take care of its own market, but the national feature is essential, so that one section may not pull down what another section has built up.

The "Detroit" plan adopted at the recent meeting of the N. W. D. A. had previously been recommended to manufacturers by the league, and it is the most easily carried out plan, up to date. If followed out faithfully by all parties concerned, it must inevitably result advantageously to all. It is not necessary here to explain the plan in full, as it has already been published in all the pharmaceutical journals. Suffice it here to say that the Detroit convention was noted as being the most harmonious ever held by the N. W. D. A., and the retailers present emphatically helped to make it so. The plan there adopted to be a success must have the active support of jobbers and retailers. The antagonism of either means failure.

I would advise that the retailers confer with their jobbers in friendly convention, each for the good of the other. The former can help the latter in organizing by instructing their traveling men to solicit petitions from their retail customers to the manufacturers, asking them to adopt the retail feature of the plan. These same commercial men can aid us in forming local branches of the league; they make splendid canvassers, besides working in their employers' interests by so doing. The "drummer" is commonly looked upon as a sound and level-headed adviser. The manufacturers whose products are worth handling are ready when the retailers say so. Judging from what has already been done in some sections, we can deluge them with petitions.

My dear retail friends, if it is worth while at all to regain some of our lost prestige in certain lines of goods then it is worth some slight effort on your part. Come out of your shells! Put your shoulders to the wheel! If the measures suggested by earnest men who have given liberally of time, labor and money for years in your behalf are not to your liking then by your united wisdom show them a better way. At all events sink individuality for the common good.

It is a good sign to note, in localities where petitions are being extensively circulated for the Detroit plan, that the daily papers, at the instigation of their best friends, the advertising cutters, have already begun to expose this imposition (?) on the "dear public." The advertising cutter is a keen business man. No one knows better than he what can be done by united effort on the part of the legitimate trade. He feels that "there is something in the wind. He must 'nip it in the bud' by a liberal dose of 'bluff.' I often wonder if the aforesaid "dear public" ever stops to think how enormously it must pay for goods not on the advertised (full page) list, for certainly these sold-at-cost, draw-you-in "bait" cannot support the immense establishment.

Pay no attention to these assaults. Remember that "to the victor belongs the spoils." Know your own strength, and knowing it, unite in any legitimate measure that promises success. Organize to call and then join the league.

Robert J. Frick, corner 6th and Chestnut streets, Louisville, Ky., secretary of the league, will be glad to answer any questions you may be pleased to ask pertaining to his office, and it will make the treasurer, Frank H. Carter, Indianapolis, Ind., happy to receive your contributions. To those seeking information as to hotel accommodations or other matters relating to the meeting, our State executive, Mr. V. Koska, 700 9th avenue, New York City, will be pleased to assist you while the undersigned is ever at your service.

HENRY CANNING, President.

## The Crisis is Over.

Robert J. Frick, Sixth and Chestnut streets, Louisville, Ky., secretary of the Interstate Druggists' League, has issued the following circular: The crisis is over, and the Interstate Retail Druggists' League, having a remedy in the Detroit Plan, will endeavor with the co-operation of the retail druggists of the United States to put this plan in force. You all are no doubt familiar with this plan, which was adopted at Detroit by the meeting of the N. W. D. A., and it is upon this plan that we hope to accomplish our object. The League, while not making public the work done during the past few months, has been very successful in many localities in the East, and it is this section that has prevailed on the officers of the League to call a special convention of this body, to be held in New York City, on Tuesday, February 6, 1894,

at Ionic room, Terrace Garden No. 147 E. 58th street, at 10 o'clock A.M. By reading the president's address you will more fully understand what is desired to be accomplished at this meeting.

Before the League was organized a few years ago at St. Louis, the retail trade in many sections was in the most demoralized condition. The few States represented at St. Louis went to work with a vim, and in the course of eighteen months had over twenty different States interested in our work. Up to that time the jobbers and manufacturers thought it useless to listen to the *Retailer's Plea*. But look back at their meetings and notice the interest the retailers have awakened; and they have shown their good will by offering a plan whereby we can eventually accomplish our object, but it needs the hearty co-operation of all the retail druggists in the United States. Therefore we kindly urge you to bring this matter before the druggists in your section and before your local association, and urge them to send representatives to this meeting; or if not able to be present in person, have them to take action in this matter and send the report to the meeting. We are in a position now to be able to accomplish some good, and we need your assistance.

For further information concerning the meeting address the secretary of the league. For hotel accommodations and other matters concerning the meeting locally address State executive of New York, Mr. V. Kostka, No. 700 Ninth avenue, New York City.

#### A Manufacturer's Views.

The Weeks & Potter Company, of Boston, Mass., have issued the following circular:

Referring to the circular recently issued by us concerning the so called "Detroit Plan," we are glad to state that a modification of the first idea will be tried by a number of manufacturers. This change was suggested by a special committee appointed to confer with the committee of the N. W. D. A., and in such form was submitted to the N. W. D. A. at the Detroit meeting, and was very favorably received.

Instead of allowing the manufacturers to sell only to recognized jobbers, it is recommended that proprietors fill orders for full quantities will rebate discount from every regular house recognized as belonging to the number who will faithfully observe the prices and conditions established by the manufacturers. This grants to the retailer the same rights that are granted to the jobber, and the retailer may buy direct from the manufacturer in quantity lots and at the best discounts, provided he agrees to maintain strictly the conditions set forth in the contracts submitted. It forbids the division of such quantity lots. It gives the jobber no rights beyond those granted to any man who has the necessary capital, and who shows a willingness to comply with the terms of his contract.

It is, we may say, simply an extension of the rebate system, and although we are opposed to this system on principle we nevertheless must admit the necessity of living up to all contracts, and we hope that the retailers will see the necessity of strictly living up to and enforcing the terms of such agreements. Every retail druggist should consider it his duty to report immediately, either to the manufacturer or his jobber, any neglect of these contracts on the part of any dealer.

If any retailer has reason to suppose that rebate contracts are being wilfully

broken by any dealer in his vicinity, we should be glad to receive any particulars that he can offer of such digression, and we will take it upon ourselves, in his behalf and in the interest of all, to make a thorough investigation of the matter, and if the charges are proved, to see that supplies from the manufacturer are denied him.

We will be very glad to receive any such communications. We will keep our correspondent informed in detail as to our actions and the results in tracing the matter out. We are very glad that the original plan was modified so as to grant to every dealer the rights which his capital and ability entitle him to.

#### Random Notes of a Rambling Journey.—IV.

JACKSONVILLE.

From its position as the gateway to the picturesque parts of Florida as well as from its large trade in fruit, timber and grain, Jacksonville, the commercial metropolis of the State, is a place of considerable importance though tourists in search of picturesque scenery, historical relics, quaintness of street architecture, or the numerous other attractions cherished of the class, find comparatively little to interest them, and as a rule spend but a short time here before hastening on to more attractive resorts. The city is situated on the left bank of the St. John's River, 22 miles from its mouth, was founded in 1822, and named after General Andrew Jackson. It is a queer combination of the popular seaside resort with many of the signs of rude enterprise common to Western towns of mushroom growth. The shade trees of bitter orange and other sub-tropical growths which line the residence streets of Jacksonville serve, however, to give the city an appearance distinctive from places further north and are a welcome relief to the dull monotony of view inseparable from a land of sandy and verdureless soil. Jacksonville is much frequented by visitors from the North on account of its dry and equable climate, although, as remarked above, it is in no sense a Winter resort, being regarded as little beyond a stage on the way to St. Augustine and points further south. The hotels of Jacksonville are superior to the average run of southern hostleries, the accommodations and cuisine of the St. James hotel, being exceptionally fine, and comparing to advantage with the hotels of Washington and Philadelphia.

Jacksonville druggists who believe in the regulation of prices have for some time past been waging war against a member of the craft who advertises cut rates on patent medicine. But their efforts to boycott the obnoxious dealer have not been followed with even a modicum of success. On the contrary his business seems to have prospered by the efforts made to suppress him, and he is now making a larger turn-over with corresponding profits than ever before. The history of Wm. A. Dell's relapse from grace, for this is the name of the enterprising apothecary, has some features of interest and will doubtless find parallels in other communities. There had been much secret cutting practiced by Jacksonville druggists prior to the time Mr. Dell came out openly with advertisements of cut prices; and inroads in his receipts were being made by many who professed to maintain full prices. He claims that on this account he was led to act on the defensive, and in consequence decided to come out boldly and advertise the sale of proprietary

remedies at about the cost price to retail druggists. This he states he was enabled to do with profit by purchasing the goods in large quantities direct from New York dealers at bottom figures. Previous, however, to coming out openly in this manner he attempted, as he says, to convert his fellow druggists to Interstate League principles by coming forward with an agreement binding himself by a forfeit of \$2,000 to uphold prices, provided each member of the League would do likewise. This they refused to do and the merry war commenced. His tactics have been superior, in most instances, to those practiced by the League, one of his striking hits being the publication, in the form of an advertisement in the Jacksonville daily newspapers, of the text of a set of condemnatory resolutions passed against him on the previous evening by the local committee of the Interstate Retail Druggists' League, together with the full names of the committee. This brought him inquiries for supplies from many remote parts of the State of Florida. During 1892 his business increased three-fold and the prospects for 1893-4 are still more favorable. He attributes all of the success to advertising, and like many more of the successful pharmacists I have interviewed he acknowledges his indebtedness to the valuable series of "Tips on Advertising" inaugurated by THE AMERICAN DRUGGIST.

On Bay street my attention was attracted to a clever display of holiday goods in the show windows of Hughes' Pharmacy. The proprietor, Geo. Hughes, is well known to New York druggists as the former proprietor of the handsome St. Catherine Pharmacy at 58th street and Madison avenue, later conducted by George Haight.

Mr. Hughes is very popular in Jacksonville and stands high in pharmaceutical circles, being prominently identified with the State board of pharmacy. He is now contemplating the erection of a larger structure on the site occupied by his present establishment, which has become too small for his increasing business. He is enthusiastic on the subject of advertising and employs the local newspapers to good advantage, adapting many of the ideas contained in "Tips on Advertising," as well as others contained in *Printers' Ink* and periodicals of a similar character, to which he subscribes freely. Equally prominent with the druggists mentioned above are William Fairlie, Bay and Brough streets; S. P. Watson & Co., and N. Woolridge. THOMAS J. KEENAN.

#### Gotham Gossip.

Wilson's Thirty-fourth street pharmacy, located as it is in the midst of the "Tenderloin District," might well be named "The Tenderloin Pharmacy" but for the implication of a certain degree of "toughness" that might attach to that name, and it is too carefully and scientifically conducted a place to be lightly considered. The Gossiper stopped in on Monday to ask about the striking window display, which was being made of "Turkish Shampoo," and had the pleasure of finding in M. Hall, P. C. P. '91, the reception clerk, an old-time Philadelphia friend. Mr. Hall was junior apprentice with Henry C. Blair's Sons while I was senior with Wm. Procter, Jr., Co. These two conservative firms maintained the old Philadelphia custom of having clerks come in as "apprentices" and remain the whole four years their apprenticeship, during which time they must attend college



graduating by the end of the four years. As far as possible the old-time methods were pursued, and the spiritual, physical and intellectual welfare of each apprentice was conscientiously looked after. Owing to the exigencies of modern business it was no longer possible for either firm to have its "apprentices" board with the family, and as a compromise our boarding house was selected and our board paid for us. In meeting Mr. Hall there arose delightful memories of that eminently respectable Pine street boarding house which at that particular juncture was honored by our presence, and embarrassed by our appetites—the landlady abandoned the business as unprofitable. The Elderly Maiden Lady present in all boarding houses took on here an added degree of quaint precision of speech from her Quaker descent and training. The Eminent Respectable Widow and her Daughter had a special degree of respectability, being the relics of a clergyman and being, what is not always the case in an Eminent Respectable Widow and her Daughter, very companionable and warm hearted. The Bohemian Element was furnished by Leland Williamson, sub-editor of the *Evening Bulletin*, an ardent admirer and, on occasion, most admirable mimic of the elder Salvini—even the Bohemian Element, you see, was eminently respectable. We student-apprentice-clerks, maintaining uniformity as to numbers and general characteristics, though changing from year to year as to individuals, contributed our own quota to the queer conglomeration. Our recruits were drawn mostly from the country, and the gradual development of the peachy-cheeked, shy country lad into the somewhat foppish, self complacent and, in his own mind, omniscient Ph.G., could be observed in all its various phases at the same time, nearly all of us being at some different stage of development. How shyly and blushing we took our places at first, how enviously we watched and listened to the Senior Clerk chatting affably and complacently with Leland Williamson and his charming wife! How confusedly we stammered (inwardly cursing our stupidity) when the pretty young Quaker school teacher opposite asked us "will thee pass the rolls." Many a Philadelphia apprentice will recall it, and recalling it sigh for the old, old days.

The dumbwaiter game is a swindle conducted in the following manner: The swindler gives an order at some store for say \$3 worth of goods to be sent to one of the upper floors of some near-by flat house together with change for a five or a ten dollar bill. The errand boy sends up the goods and the change on the dumbwaiter. The swindler having gained access to the hallway above takes the change off the dumbwaiter and decamps. William Cox, the pharmacist, of Ninth avenue and Twenty-ninth street, knows how this game is worked, having paid for the knowledge. Mr. Cox has the satisfaction that David Williamson, the negro lad who played this trick at his expense, has been locked up. Mr. Cox will never put his trust or his change in dumbwaiters again.

Among the passengers on the steamer Paris on her recent eastward voyage was Robert Martin, formerly manager of the New York office of Sharp & Dohme. Mr. Martin went abroad in October and visited Paris, Vienna, Berlin and London and completed arrangements to act as manager for Oppenheimer, Son & Co., Limited, London. He will at the same time represent Sharp & Dohme's interest abroad in Webber's pepsin and ergotole. It is probable that Mr. Martin will return on a business trip to New York about March.

Dr. H. M. Whelpley spent the Christmas holidays on a hunting tour in Illinois. This has a suspicious suggestion of a St. Louisan's method of ridiculing Chicago. He leaves the peaceful abode of civilization on Olive street, St. Louis, and wanders out into the wilds of Illinois to hunt big game. Cannot the hereditary president of the Diastase Club go him one better?

One of the prettiest Christmas windows seen by The Gossiper was that of M. Ammermann & Co. at Eighth avenue corner of Thirty eighth street. The display consisted of a pale green background on which the different styles of Lazell, Dalley & Co.'s perfumery were displayed, interspersed with groups of miniature electric lights. The effect was very fine at night.

E. E. Dickinson, the prominent witch-hazel extract manufacturer, of Essex, Conn., was in this city last week.

Henry J. Maris took a run over to the New York City house of the firm last week.

### Boston Budget.

The friends of Thomas J. Hamitt, Ph. G., will be pleased to hear of his marriage to Miss Kittie McMahon, of Worcester.

E. F. Murphy & Co. have opened their new store on High street, Holyoke. It is one of the finest stores in Western Massachusetts.

Robert H. Kimball's action of tort against Harlow E. Woodward, 100 Tremont street, has been decided in favor of the plaintiff. Mr. Kimball leased a part of the premises 100 Tremont street on May 5, 1890, from George Johnson & Co., the lease to run two years and eleven months at \$1,000 a year. In November, 1891, the lessors assigned their interest in said store to Mr. Woodward, who, in February, 1892, evicted plaintiff to his great damage. The amount sued for was \$5,000, but the jury awarded only \$918.80.

Frank Goodall, a drug clerk, committed suicide in his uncle's store where he was employed, by taking oil of mustard. He had only returned from Vermont a few weeks. He had been riding in the afternoon and seemed in good spirits. On his return, he stepped behind the dispensing counter and as he poured some oil of mustard in a glass, he said "Don't this look nice?" He then drank the contents of the glass. Medical aid was summoned but he could not be saved. He died at the City Hospital in great agony. He was a graduate of the Massachusetts College of Pharmacy, in the class of '92. He was well liked by the patrons of the store and will be missed. The burial took place at Rutland, Vt.

Henry D. Huggan and his store at Maverick Square, East Boston, were victims of the wrath of two inebriated individuals who called recently at the pharmacy in question. When the men came into the store they requested the clerk to serve them something to drink, and they were furnished with plain soda containing a little bicarbonate of soda. While sipping their drinks they suddenly became boisterous and Mr. Huggan stepped from behind the prescription desk and ordered them to be quiet. They desisted for a short time only, and then one of them blew a mouthful of his drink over the dress of a customer. Mr. Huggan came forward a second time and said that unless the noise and ungentelemanly conduct ceased he would call a police officer. At this the men were greatly enraged, and both hurled their glasses at the proprietor's head, but fortunately they did

not hit the intended mark. One of the men then attempted to strike Mr. Huggan, but his knowledge of sparring was inferior to the latter's, who warded off the blows. By this time both of the men were in a perfect frenzy and seized bottles and other articles about the store and threw them at Mr. Huggan who succeeded in dodging them all. By the time 25 or 30 bottles had been destroyed in this manner and several show cases and glass doors smashed, the clerk, who had been sent for assistance, returned with the police and the men were arrested. It was found that \$480 of personal property had been destroyed in the melee. When the cases came to the attention of the court both men were found guilty; one received two months in the house of industry, and the other was sentenced to ten months in the same institution, and in addition was held for the grand jury on the charge of malicious mischief.

The Walter M. Lowney Company lost a safe by the recent World's Fair fire. It was in the top of their building, the Temple of Vesta, in which their exhibit of chocolates and bonbons was held. The safe contained nothing but papers and memoranda. At the close of the Fair the Lowney Company presented their building to the Exposition authorities. It was the intention to preserve the temple as long as possible, and it was to be utilized by the superintendent of the grounds as his headquarters. This is the second fire at the Fair grounds at which this company has been the loser. By the burning of the cold storage warehouse last July their whole stock was destroyed. They were fully insured, and, strange to say, were the only people carrying insurance on the stocks in that building.

The long expected decision in the case of the Commonwealth vs Melville has at last been arrived at. This was a case in which the Board of Registration in Pharmacy was the complainant and Russ G. Melville, a former druggist of this city, was defendant. Melville was complained of for compounding drugs without being registered. His conviction in the lower and superior courts followed, and his counsel then carried the case to the Supreme Court on points of law; consequently this final verdict fully establishes the validity of this portion of the law under which the board is acting. The defendant claimed that there was no board of registration in pharmacy, as the act creating the board had been repealed by Chap. 267 of the acts of 1887, and, consequently, he should have been acquitted. The court holds that even though Section 8 of the Act of 1865, creating the board, was repealed by the Act of 1887, still Section 3 was not obliterated as a document, and when referred to by other relative sections, or when needed to complete the full meaning of another section, it still may be read; and accordingly the defendant was amenable to Section 9 of the old act, under which he was complained of.

### New York State.

The Eureka Chemical Co., of Syracuse, has been bought by Nichols & Co., of New York.

W. H. Shannon anticipates remodeling the rooms over his drug store in Valley Falls for the use of an Odd Fellows' lodge.

Leonard Baker, twenty-two years old, who was arrested charged with stealing about \$100 worth of goods from the drug store of Kirby & Co., New York City, has been honorably discharged.

Chamberlain's drug store in Rochester was burglarized recently and about \$8 taken from the money drawer and stamp department.

William Galloway, of Watertown, robbed the drug store of Gurney & Pettit in Sacketts Harbor a few nights ago and stole about \$100 in money.

The drug store at the corner of North Mainstreet and Second avenue, Rochester, was recently opened under the name of the "The People's Pharmacy."

The Le Page Chemical Co. have filed articles of incorporation to manufacture Venice turpentine and other chemical products in New York City.

William Howard, of Elmira, has retired from the drug business, selling out his store to Levi E. Horton, of Avoca, N. Y., and Charles E. Horton of Cleveland, O.

Frank Startup has purchased the drug store of Dr. C. W. Banks at Germantown. Mr. Startup is a practical druggist, having been in the business for a number of years.

L. W. Reycroft, of Cambridge, has announced that during the existing "hard times" he will dispense to worthy persons, properly vouched for, prescriptions free of charge.

Four boys were recently arrested in Cortlandt by private detectives charged with stealing about \$150 worth of goods at different times at the wholesale drug store of F. S. Hubbard & Co.

Johann Hommer, who after a sojourn in in the United States, returned to Boos, Austria, last year, has recently returned to the United States, and accepted a position as prescriptionist at Dietz's pharmacy on Atlantic avenue, Brooklyn.

#### Richmond Notes

The Virginia Hospital was opened on Thursday, January 11, with appropriate ceremonies.

J. A. V. Ramos has moved his store from Reservoir and Cary streets to 1801 West Main street.

The First Street Pharmacy, at the corner of First and Leigh streets, is to be moved to Fulton, a suburb of Richmond.

The new Chamber of Commerce building was dedicated a few days ago. Col. J. B. Purcell, the prominent wholesale druggist, was for a long time its president, and to him much praise is due for the enterprise shown in erecting the building.

#### Ohio.

Rev. J. Sheller, McCure, has sold his drug store to C. M. and E. B. Fiser.

Schaffner's drug store, Ashtabula, will be moved to the post office building in the Spring.

A new pharmacy at the corner of Hopkins avenue and Carter street is the latest addition in West Norwood.

On Jan. 8 fire destroyed the wholesale drug store of West & Truax, Toledo, Ohio. Loss \$59,367.62, insurance \$44,000.

The Walding, Kinnan & Marvin Co., Toledo, have incorporated for \$100,000 and will manufacture and sell drugs. It is simply a reorganization of the present firm.

I. N. Reed Son's drug store, Toledo, was damaged by fire Jan. 8 by the burning of the buildings on the east side of Summit street. The loss was mostly the damage done to plate glass and goods in show window.

The Toledo Drug Co. has been incorporated for \$150,000, and will be man-

aged by Mr. E. D. Peck, of West & Truax, Mr. Chas. West retiring. Mr. West has been in the wholesale drug business at Toledo nearly fifty years. The president is D. Peck; secretary, F. K. Hogue; attorney, Curtis T. Johnson.

Mr. Krauth, formerly of Toledo, but for the past year residing in Cleveland, has again taken up his residence in Toledo and is fitting up the drug store formerly occupied by Jos. Zeigler, where he will open a first class drug store in the near future.

#### Michigan Mention.

The Brown Pharmacy Company was incorporated last week with a capital stock of \$10,000. The firm will do business at Detroit.

The stock of drugs and groceries owned by Walter Berridge at Flint was destroyed by fire and water, January 8. Loss not known, covered by insurance.

Fire destroyed the business section of Bellevue last week, causing a loss of \$50,000. Among the losers were Spaulding & Robinson, druggists, loss \$500, caused by breakage in moving the stock, no insurance; Dr. Hull, drug stock and library, \$1,000, no insurance; and Dr. Adams, drugs and library, \$200, no insurance. All will resume business. The town was not equipped with suitable fire apparatus.

#### Western Notes.

T. W. Wood, of Sioux City, has removed his drug stock to Maurice, Ia.

C. E. Lull, a druggist of Fort Collins, is reported to have failed for about \$4,200.

Burglars entered the drug store of Huber Brothers at Fond du Lac, Wis., and secured \$10 and an overcoat.

Dr. W. H. Going is in Atchinson buying an opening stock of drugs from McPike & Fox for Junction City where he is located.

The H. T. Clark Drug Company, Lincoln, Neb., will, during the ensuing year, make a considerable increase in their business facilities.

The oldest settler and business man of Sedalia is said to be Dr. R. T. Miller, who has been a physician and druggist there for thirty-three years.

A petition has been sent to Governor Boies to reduce Druggist Kelly's (of Marshalltown, Ia.) fine for violation of the pharmacy law from \$1,000 to \$300.

The J. R. Watkins Medical Company of Winona, Minn., with a capital stock of \$500,000, filed articles of incorporation recently with the Secretary of State.

H. S. Foulkes, who has recently returned from the East, will open a drug store at the corner of Fourth and Chestnut streets, Terre Haute, Ind., about February 1.

The Wells-Yeager-Best Co., with a capital stock of \$10,000, was recently incorporated, the directors being Albert Wells, E. J. Yeager and Frank M. Best. It will carry on a wholesale and retail drug business in Lafayette, Ind.

James C. Howell, a prominent druggist of Hannibal, Mo., and Miss Alice Shields, daughter of Dr. D. H. Shields, ex-chairman of the State Democratic Committee, were married recently.

A number of druggists were recently arrested in San Francisco, Cal., on complaint of Secretary Kance of the Pacific Society for the suppression of vice, on a charge of selling morphine without a prescription.

## OBITUARY.

O. G. Harrison Ph.G., M.D., a graduate of the New York College of Pharmacy, and for several years past an instructor in that college, died on Sunday, January 14, of appendicitis. Dr. Harrison had accepted the editorship of the proposed journal of the Alumni Association of the college, the first issue of which has not yet made its appearance. He was a studious, earnest, and capable teacher, and popular alike with the students and the faculty.

Among the killed in the terrible rear end collision on the Delaware, Lackawanna & Western Railroad some three miles from Hoboken on Monday morning was James Doty, a druggist, of Murray Hill, N. J., and Walter K. Purinton, manager of the D. Webster King Glue Co. Two sons of Carl A. Schultz, the well-known manufacturer of mineral waters of this city, were among the injured, the elder son Carl A., Jr.'s injuries being very serious in their character. Eleven were killed and fifty injured. The accident was caused by a fog.

Dr. C. K. Sampson, an old pioneer and druggist of St. Louis, Mich., died Tuesday, January 10, after a week's attack of the influenza. He was born in Dover, N. Y., March 21, 1825, came to Michigan in 1836 and settled on a farm in Lenawee County, where he remained until 1852. He then moved to Adrian, Mich., and engaged in the mercantile business. He was married to Wealtha L. Youngs, of Brooklyn, Mich., in the same year. In 1872 he came to St. Louis and started in the drug business, which he has continued ever since. He was an old member of the Masonic Order and a R. A. M., also Royal Arcanum. Mr. Sampson was well known and respected by the trade.

#### Recent Drug Fires.

Dr. Hansey's and Shilling & Co's stores, Colmesneil, Texas.—John W. Perkins & Co., Portland, Me. Loss, \$3,000; fully insured.—The Hart Rheumatic Remedy Co., Buffalo, N. Y.—Loss, \$5,000.—Hughes Turpentine Co., Bluff Springs, Fla.—Wheeler & Leffen, Belleville, Mo. Loss, \$5,000; partly insured.—Allen & Company's store, Sheldon, Ia.—H. C. King's store, Oscoda, Mich. Loss, \$2,000; partly insured.—John J. Orr's store, Tecumseh, Mich. Loss, \$2,500.—John W. Terrill, Canton, Mass. Loss, \$1,000; fully insured.—Hogle Bros., Mt. Vernon, Ia. Loss, \$1,900.—Dr. Stovall, Birmingham, Ala.—C. D. Gitt's store, Danville, Va. Loss, \$4,500; partly insured.—Cuncannen's store, Grand Rapids, Mich. Damage, \$600; fully insured. J. W. Wyatt, Poolville, Tex.—C. D. Gitt's store, Danville, Va.—J. H. Jones' store, New York City, N. Y. Loss, \$2,000.—Frank Dalrymple, Hicksville, O.—Heyer's Pharmacy, Galeton, Pa.—Edwin Crocker, Narrowsburg, N. Y.—Kassel's drug store, Waco, Loss, \$3,500; insurance, \$1,000.—Bolling & Matthews' and also Lancaster's pharmacy, Waxahachie, Tex.—E. V. Allen, Slater, Mo. Stock \$3,000; insurance, \$2,400.—John W. Perkins & Co., Portland, Me. Loss, \$3,000; covered by insurance.—W. C. Lemon, Kansas City, Mo. Loss about \$2,000.—Tarpley & Kellam, Dublin, Ga. Loss not stated; insurance, \$2,800.—T. H. Hinchman & Sons, Detroit, Mich.—West & Truax

and I. N. Reed, Toledo. Complete loss; insurance not stated.—Harvey & Harvey, Valdosta, Ga.—Wiley & Wallace, Philadelphia, Pa.; small blaze.

### Louisville Druggists and the Dry Goods Trade.

A special committee of the Louisville Botanical Club, the local organization of pharmacists, has reported to the club that an agreement has been entered into by the dry goods houses. They agree not to handle any medicinal articles such as vaseline, ammonia, camphor, etc. They will however, continue to sell toilet articles. There was a prospect of a lively war between the retail druggists and the dry goods retailers on this line but the matter was settled by arbitration. The settlement seems to be satisfactory to most of the druggists.

### Boards and Colleges.

THE NEW YORK ALUMNI held a pharmaceutical meeting at the college on Wednesday, January 10. The lecture room was well filled. Mr. Graesser, the president, called the meeting to order at 8 P.M. Messrs. Hopkins, Kraemer and Oetinger were elected to membership.

Mr. Graesser introduced Prof. Virgil Coblentz, who delivered an interesting and very scientific lecture on The Relationship between the Chemical Constitution and the Medicinal Action of the Newer Remedies.

Prof. Coblentz first went rapidly over an outline of organic chemistry, showing the formulae of most of the newer and many of the older remedies, and then taking them in groups showed how certain combinations always gave an expected medicinal result.

In closing the lecturer said that he expected the time would come when the chemist would put together certain compounds with a perfect certainty that the resulting substance would give an exact physiological action.

At the close of the lecture the association and the audience tendered a unanimous vote of thanks to Prof. Coblentz.

At the next month's meeting, Wednesday, February 14, Dr. Cyrus Edson will lecture on "Nervous Exhaustion," and a large audience is assured.

MINNESOTA BOARD.—H. P. Barclay, of Stillwater, has been appointed by the governor, a member of the Minnesota Board of Pharmacy.

ILLINOIS BOARD.—The new State board of pharmacy met in Springfield and organized by electing L. C. Hogan of Chicago, president; H. H. Green, of Bloomington, vice-president; L. N. Coffee, of Cairo, treasurer; and Frank Fleury, of Springfield, secretary. The board will hold an examination to-morrow.

THE GEORGIA BOARD OF PHARMACY will meet in the capitol, Atlanta, February 26, at 9 A.M., to examine candidates for druggists' license. The standard has been raised and 65 per cent will be necessary to pass now. Those intending to come up should notify some member of the board, or the secretary, Dr. H. R. Slack, La Grange, Ga.

QUEBEC BOARD.—The Preliminary Board of Examiners of the Pharmaceutical Association of the Province of Quebec, held their quarterly examination for students entering the study of pharmacy, in Montreal and Quebec, on Thursday, January 4, when thirty-two candidates pre-

sented themselves in Montreal and five in Quebec. Of these the following named in order of merit passed: Eleanor Sleeper, Joseph Earnest Nadeau, Geo. Virolle, Joseph Normandin and Valmore Ledoux. Allan Ayerst passed on all subjects but French, and Wilfred Landry on all but History. These two gentlemen will have to present themselves again for examination on these subjects. Candidates are examined in English, French, Latin, arithmetic, geography, and history. The examiners were Prof. A. Leblond de Brumath and Prof. J. Gammell. The next examination will take place on the 5th of April.

THE MICHIGAN BOARD require actual experience. At the November meeting of the Michigan Board a resolution was passed to the effect that hereafter all applicants for examination as registered pharmacists must have had at least three years' actual experience in compounding drugs in a retail drug store under the supervision of a registered pharmacist; but one month's study in a college of pharmacy will be accepted as a substitute for two months' experience above. Provided that every applicant must have had at least four months' actual experience compounding drugs in a retail store under the supervision of a registered pharmacist. No certificates of registration will be issued by the board until the applicant has furnished affidavits from the party or parties with whom he served or studied, showing explicitly by dates the length of time the applicant has been under the instruction of the employer or teacher.

Mr. Jesson has criticised the action of the board in passing this resolution, claiming that the board exceeded its powers in requiring such practical experience, and at the same time quoting the law as saying, "Licentiate shall be such persons who shall have passed a satisfactory examination touching their competency before the board of pharmacy." He also made some other strictures on the board which have called forth the following reply from James Vernor, of Detroit, who has recently declined a reappointment:

"Now, if the board can arrive at the competency of an applicant more surely through the proposed requirement, it seems to me that such a requirement is not only proper but imperative, and fully within the powers of the board.

The simple facts in the case are that board examinations have been conducted on about the same lines all over the country for the past four or five years, and there have sprung into existence teachers and so-called pharmacy schools who, for a slight compensation, and in a very short space of time, prepare young men to "pass the examination of boards of pharmacy." They do not fit him for the duties of a pharmacist, but simply teach him, parrot like, to answer such questions as are likely to be asked, the result being that the board is deceived and an incompetent person is given a certificate.

As to the great big bugaboo that called forth the quotation from the German Emperor, "My will is your will, my law is your law," I desire to say that I have been on the board from the beginning and believe that I have the interest of its work fully at heart, and I assure your readers that the resolution requiring actual experience had my most hearty support, just as I believed it would have had that of Mr. Jesson, had he been on the board at the time.

If you will read the resolution, you will observe that college students are not at all discommoded by the proposed requirement, as eighteen months' college experi-

ence equals and takes the place of the required thirty-six months of actual experience, in all but the four months required of every one. Certainly, no one will contend that *four months'* experience in a drug store is too much to ask of any clerk. In this connection I will state that the proposed requirement met the hearty approval of the faculty of the Pharmacy Department of the University of Michigan.

The construction that Mr. Jesson says "would be naturally placed upon the resolution" may seem so to him, but to me they seem like men of straw, set up for the purpose of being knocked down again:

1. I am sure that it is entirely immaterial to the board what the size of the classes may become.

2. Intelligent physicians *will have had* either the necessary college or store experience.

3. How can a young man obtain knowledge sufficient to fit him for the practice of pharmacy, except in a college or in a store; and how long is it since unregistered assistants have been obliged to work without any compensation?

I am thoroughly surprised at Mr. Jesson's statement that "any bright young man ought to be able to secure an assistant's certificate after one year's work," as no one knows better than himself that the line of the power to do harm, between an assistant and a registered pharmacist, is almost undiscernible; the absolute necessity of nearly complete knowledge on the part of the registered assistant has often been discussed and was fully recognized by the board while Mr. Jesson was still one of its members.

As to the required affidavits not being obtainable in certain cases by reason of death or removal, Mr. Jesson need have no fear on that account. The board will undoubtedly retain brains sufficient to cope with such tremendously weighty points as that, even after all of the original members have retired.

I do not agree with Mr. Jesson that "the board will find a large majority of the druggists of the State arrayed against its action," much as he would apparently like to see it so. The intelligent druggist does not care to engage a clerk holding a certificate of registration issued after examination by the board of pharmacy, only to find that he has employed an incompetent person whom he is immediately obliged to discharge. The Michigan board of pharmacy will, in my opinion, continue to be considered "one of the fairest boards in the country. (This step is certainly in the interest of fairness to the competent pharmacist.)

I believe that druggists desire good, competent clerks, and that is exactly what the board is endeavoring to furnish them; but, beyond the druggist, and over and above everything else, stand the health and lives of the people of the State of Michigan that demand such action on the part of the board, no matter how arbitrary it may seem, as will prevent the remedies upon which so much depends being handled by incompetent persons.

In conclusion I desire to say that any modification that may become necessary in the resolution can and undoubtedly will be made as soon as that necessity becomes apparent. Mr. Jesson need lose no sleep on account of the board, any more than myself. I have met with the board as a member for the last time, but my many years of acquaintance and connection with the gentlemen comprising the board entitle them to my fullest confidence, and I feel that the work is in the very best of hands.

### Artistic Work.

We are in receipt of a handsome colored calendar, which comes as a Christmas greeting from Frederick Stearns & Co., of Detroit, and with it their wishes that the days of '94, as numbered thereon, may be bright and prosperous for us.

This calendar is printed in colors by an entirely new process, and is, we believe, the first example of its kind ever offered to the public. The process is one which has occupied the attention of investigators in photographic art for many years, but until recently was one of those ideals as seemingly remote as that of perpetual motion. This picture is said to be a development of photographic processes by which the colors of the original painting are reproduced with absolute fidelity. Inclosed with it we found a reprint from an article on "Photography in Colors," which gives fuller details on the subject, and which proves interesting reading.

With the exception of the plates themselves, every particle of the work on the calendar was done in Messrs. Stearns & Co.'s own pressroom and bindery, and it is doubtful if any establishment, devoted to art printing exclusively could improve upon their effort.

The calendar will only be furnished by Messrs. Stearns & Co., on receipt of twenty-five cents to cover cost of publishing, postage and packing.

### Thanks for Seabury.

The class of '94, New York College of Pharmacy, have passed the following resolutions:

"WHEREAS, Messrs. Seabury & Johnson, with their customary generosity have kindly favored us with an inspection of their laboratories, and as a means of expressing our gratitude and appreciation of their courtesy, be it

*Resolved*, That we, the members of the Class of '94 of the New York College of Pharmacy, extend our sincerest thanks to Messrs. Seabury & Johnson, and to others who contributed toward making our sojourn instructive and entertaining, and be it further

*Resolved*, That these resolutions be spread in full upon the minutes of the Class of '94 and a copy forwarded to Messrs. Seabury & Johnson."

### A Hot Soda Hint.

Writing of hot soda flavors some time ago Thomas Warwick, the well-known special writer, took occasion to say concerning beef extract that: "Liebig's beef extract is the one generally preferred for hot soda water purposes, as its keeping qualities seem somewhat better than those of most other brands. The extract need be merely dissolved in hot water, the proportions required being about four ounces of beef extract for a gallon of beef tea."

### Drug Store Fixtures.

Are you about to fit up a store? If so, you should investigate carefully before making any expenditure so as to be sure of securing the best possible returns for your outlay. Pynn & Cameron, 87 Haverhill street, Boston, Mass., have unusually excellent facilities for fitting up drug stores and for doing it at a very reasonable price. Write them for estimates, whether for fitting up a new store, refitting an old one or making alterations or additions to fixtures already in place, and when writing please mention this journal.

### Tin Foil and Bottle Caps.

Lehmaier, Schwartz & Co., have largely increased their plant for the manufacture of bottle caps, tin foil, etc. By the employment of new and improved machin-

ery they are enabled make quotations lower than ever before. Write for prices. Mention this paper. Lehmaier, Schwartz & Co., 38-37 Bleecker street, New York City.

### A Handsome Prize.

The prize microscope, valued at \$75, offered by Seabury & Johnson several months ago to the member of any pharmaceutical association who should write the best paper on "Substitution" and read it before his association, has been awarded.

The committee to whom the papers were submitted, consisting of President S. W. Fairchild, H. W. Atwood and T. J. Macmahon, of the New York College of Pharmacy, on December 20, decided that the paper of Addison Dimmitt, chairman of the executive committee of the Kentucky Pharmaceutical Association, was the best, and Seabury & Johnson at once notified him that the microscope was his.

### A Convenient Reference Book.

When ordering corks occasionally a doubt arises as to sizes and description. A valuable aid in this connection will be furnished by the price list and illustrated catalogue issued by Truslow & Co., 219 Pearl street, New York City. Being among the largest manufacturers of corks in the world, this firm's list contains much that renders it interesting and valuable to every pharmacist or manufacturer. They will forward a copy free of charge to any one who mentions this journal when writing them.

### Paste to Stick; Labels to Glass and Metal.

(Nouveaux Remedes.)

Gum arabic.....	120
Gum tragacanth.....	30
Glycerin.....	120
Oil of thyme.....	2½

Macerate the gums separately in a little water; shake the gum tragacanth until a sticky emulsion is produced; mix in the gum arabic solution, and then filter through fine linen. Next add the glycerin, in which the oil of thyme has been previously dissolved, finally make the liquid up to about two pints with water. It is better to use distilled water. The paste is stated to possess very remarkable adhesive properties, and to keep well in sealed bottles.

### An English View of the Wilson Bill.

The last issue of the *Oil and Colorman's Journal* comments on the proposed change in the tariff as follows: "That the measure is an important one every manufacturer will be of course ready to grant. On this side of the Atlantic we should not lose sight of the fact that immediately the cost of production is lessened in the American manufactories we may expect that the American manufacturers will largely increase their trade on this side of the Atlantic. We have more to fear from low tariffs in America by our markets being flooded with their goods than the American makers have to fear from the competition of English makers. We doubt whether this aspect of the American tariff question has been as fully recognized by the makers across the herring pond as it has here, but nevertheless the fact re-

mains, and in the immediate future, should the tariff measure become law, we may expect a new and very serious competitor from the American manufacturers of paints and some chemicals.

### NOTES ON PRICES. CHEMICALS.

In their trade circular dated New York, January 9, the Roessler & Hasslacher Chemical Co. say the first week of the New Year shows an improvement in feeling; "the important failures which were expected have not occurred, and as stocks of most goods are comparatively light, production has to go on, tariff or no tariff, to meet legitimate consumptive wants, and we are encouraged in the hope for better times by actual facts. These better times were foreshadowed by the different advances we had to report in our December list, which have been maintained, and which have made further progress in the instance of quinine and sal ammonia. The price of our celebrated gold and silver brand sulphate of quinine we advanced in the course of last month to 22½c. per ounce in 100 ounce tins, and are ready to take orders at this price for spot and for delivery within 60 days."

### Review of the Wholesale Market.

NEW YORK, January 16, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

Dealers, as a rule, report the aggregate business to date as somewhat in excess of the corresponding period last year and prices generally appear well sustained. Quantities, however, seem to be carefully avoided, and an improvement in this respect is not anticipated until the season has further advanced and the indications of trade are of a more positive character.

### DRUGS.

BALSAM FIR is strong. Peru has met with good inquiry and is quoted at \$1.40 @ \$1.60 as to quality and quantity. Tolu, 25 @ 27c., as to quantity, quality and seller. Copalba is in first hands and held at 35c. BLUE VITRIOL is steady and is quoted at 3½ @ 3¾c. as to quantity, quality, and seller.

BORAX is without quotable change, powdered selling at 8½ @ 8¾c.

COCAINE MURIATE.—It is anticipated that there will be a rise of about 10 per cent. from previous values. The situation abroad is strong.

COCOA BUTTER.—Of foreign in bulk sales are making to arrive at 32½c. The spot market is about bare of this product. Sales are reported of 4,000 lbs. foreign bulk.

COD LIVER OIL, Norwegian, is strong under a continued demand, and is quoted \$19.50 @ \$25 as to brand. W. H. Schieffelin & Co. got the contract to supply the New York City Department of Charities and Corrections.

CREAM TARTAR is quoted at 17½ @ 18c. for crystals and 18 @ 18¾c. for powdered, the prices remaining unchanged and fairly steady.

CUBEB BERRIES.—Though steadier abroad, that fact has not as yet had any influence in the condition of affairs here. Ordinary is quoted 16 @ 18c.; S. & S., 19 @ 21c., and powdered 20 @ 30c.



CUTTLE FISH BONE, Trieste, is quoted 11 @ 11½c., and continues to sell freely in small lots.

ECROT is easy. German is quoted at 25 @ 26c., and Spanish 29 @ 33c., according to quantity, quality and holder.

FLOWERS.—American saffron is active and firm, and quoted at 40 @ 42c. Arnica and chamomile are receiving increased attention.

GLYCERIN is quiet; former quotations are still current. Prime quality is quoted 13 @ 14c. for drums and barrels, and 14 @ 17c. for 50 lb. cans, according to quantity and quality.

JABORANDI LEAVES being in better supply have declined to 25 @ 30c.

LEAVES.—Buchu, short, are in better position, and the market is stronger at 12 @ 14c.

LYCOPodium is quoted at 56c. for regular brands and 58c. for Pollitz, the values being firmly maintained.

MANNA has been somewhat neglected by the jobbers and shows an easier tone in consequence, having declined to 27 @ 28c. for sorts, 34 @ 36c. for small flake, and 82c. @ 85c. for large flake.

MENTHOL has sold in a small way at the extreme price of 36.

MORPHINE is quiet and featureless, without change in manufacturer's quotations.

OPIMUM opened dull and with a degree of uncertainty as to the future of the market. The consumers seemed averse to laying in stocks of any size as they did not give much credence to the report of short crops which are received from Smyrna and London. This state of things continued up to the first part of the current week, when apparently authentic cable news was received of a severe frost in the opium growing districts of Asia Minor which will seriously injure the growing crops. The cables reported the market in Smyrna as firm. This gave tone to our own market, and considerable transactions took place followed by an advance in the market quotations, which are now 22.35 @ 24.40 for either cases or jobbing lots of natural. Powdered is still quoted at 83 @ 83.10.

QUININE continues to gain in strength, the situation being favorable in almost every respect. The jobbing demand is very active and orders for good round lots are coming in freely with every mail. These are filled at 22c. regular terms from outside holders, while manufacturers continue to fill orders at 22½c. either spot or 60 days delivery, guaranteeing against a decline. These terms are bringing in a good many contracts as there is such a degree of firmness and of activity about the market that there is a good deal of talk of an advance.

#### CHEMICALS.

ACETANILID in bulk continues held at 34 @ 35c., and a fairly good jobbing business is reported.

ACIDS.—The market is fairly steady, and sales of small parcels are reported. Citric is quoted 43½ and 44c. Oxalic, English, 7½ @ 7½c., and tartaric 22c. for crystals and 22½c. for powdered.

ARSENIC, white, is quiet, and the demand is light, the quotation being 3½ @ 3½c., and Red 6 @ 6½c. as to quantity.

BLEACHING POWDER, English. The quantity in market is small and is quoted at 2½ @ 3c. German offers at \$2.00 @ \$2.25.

BORAX is without quotable change. Powdered is quoted 8½ @ 8½c., and concentrated 7½ @ 8c.

BRIMSTONE.—\$17.50 @ \$17.75 is asked for forward shipments. Spot goods are scarce, and held at nominally \$19.50 @ \$20.

CHLORATE OF POTASH meets with moderate jobbing attention, with sales of crystals at 14½c. @ 14½c.

NITRATE OF SODA.—Sales are reported aggregating 8,000 bags. Sellers have further advanced their views regarding prices. The spot range is \$1.95 @ \$2.; to arrive, \$1.90 @ \$1.95, and shipments \$1.85. QUICKSILVER is unchanged, and jobbing sales are reported at 45 @ 46c.

#### DYESTUFFS.

CUTCH.—No sales of consequence are reported. S. M. is held steadily at 4¼ @ 5c. from store and 4½c. ex-vessel.

GAMBIER is quite firm at the advance, with sellers quoting 4½ @ 4½c.

SUMAC, SICILY, is very firm at \$75 @ \$80, the available stock being small.

DIVI DIVI remains steady at \$60 @ \$65 for prime, according to quantity; sales are reported of 100 bags from store.

#### ESSENTIAL OILS.

In this department prices are quite steady as a rule, with no variations of consequence to report.

CASSIA is well maintained at 82½ @ 85c., with but little inquiry.

CUBEB is dull with sellers down to \$1.65, and the market is easy.

PEPPERMINT is very dull, with but little demand. Quotations remain unchanged at \$2.45 @ \$2.65 for bulk, and \$2.95 @ \$3.00 for H. G. H.

#### GUMS.

ARABIC.—Sales are reported of some 50 packages, and the demand is increasing.

ASAFETIDA is firmer and has advanced considerably, the better grades particularly being much inquired for and very stiff. Sales are reported at 20c. for common grade, good ordinary 25c., prime 30c.

CHICLE continues held at 29 @ 30c. though no considerable sales are reported.

SENEGAL is quiet at unchanged prices.

SHELLAC has advanced and is held firmly at 34c., VSO, 32c. diamond I and octagon B 31c., and SS 30c. The stock of button is very small and held at 32c. for No. 1. Calcutta, we understand, is also cabled higher, with the offerings light.

TRAGACANTH is improving in demand, and in view of this the market is steadier in tone.

#### ROOTS.

Prices in this department are steady but the market continues quiet.

SARSAPARILLA, Mexican, is now in first hands, the asking price being 9½c., but could probably be obtained at 9c. on a firm offer.

#### SEEDS.

CANARY, Smyrna, is dull at 2½c., and Sicily 2¼ @ 3c.

CARAWAY, Dutch, is cabled firmer from Europe, and the lay-down cost is now said to be about 6½c. The spot market is firmer in consequence, though the quotation of 6½ @ 6½c. remains unchanged.

HEMP, Russian, is quiet with the tendency of the market rather easy.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

PHYSICIAN wanted who has done detail work among physicians, for manufacturing chemists or wholesale drug houses, to take similar position with an importing drug house. Also physician to occupy position in office to attend to correspondence with physicians; state experience, reference, etc. Lock Box 2178, New York City.—2.

WANTED.—Novelties and specialties of any kind that can be sold by druggists. We have men traveling in Southern and Southwestern States all the time, and we buy anything we can sell; this is a good opportunity to introduce your goods. Send price lists and full particulars to "Soap," care AMERICAN DRUGGIST, 37 College place, New York.—2.

DRUG CLERK WANTED in a pleasant town in New Jersey; must be reliable in every respect and capable of handling nice trade. Address "Saloi," care Tarrant & Co., 280 Greenwich street, New York.

DRUGGIST SALESMEN WANTED to carry side line of toilet articles; big money; please state which house now employed with. For further information address the Orisena Co., 209 State street, Schenectady, N. Y.—4.

#### POSITIONS WANTED.

SALESMAN wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

GERMAN DRUG CLERK, graduate, desires steady situation; 14 years' experience; registered in four States; 27 years old; single. Address "Graduate," 584 Lake street, Cleveland, Ohio.

SITUATION WANTED as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

JUNIOR DRUG CLERK.—A graduate N. Y. C. P., 18 months' experience, wishes a situation; will sleep in store; wages moderate; best reference. Address Lester Carde, 374 15th street, Brooklyn.

DRUG CLERK, registered in Virginia, over 10 years' practical experience, steady and sober habits, desires position in manufacturing department wholesale house, or assistant in large retail house; references Ar. Address "Druggist," corner Duke and Alfred streets, Alexandria, Va.

#### BUSINESS OPPORTUNITIES.

DRUG STORE for rent, recently vacated by a successful druggist who has been there for five years; long lease, low rent. Brick building, 25 feet plate glass front. Address "Fine Chance," this office.

FOR SALE.—Old established drug store, in Pennington, N. J.; live stand; no other drug store nearer than five miles; stock, drugs and stationery; semi-annual town; opportunity for a cash buyer; owner studying medicine. Geo. W. Scarborough, Jr., Pennington, N. J.—2.

TO DISSOLVE PARTNERSHIP.—A first-class drug store is offered for sale in a growing city. For particulars address P. O. Box 1315, Meriden, Conn.—4.

FOR SALE.—A first class drug store in a town of 1,600 inhabitants, with railroad shops; from six to eight thousand dollars paid out monthly by Railroad Co.; first class trade; no credit; average daily sales, \$25; stock invoice about \$2,000; reason for selling in age and health; apply soon. D. W. Strouse, Monon, White Co., Indiana.

FOR SALE.—Drug store, one of the handsomest and best paying drug stores in Pennsylvania; last year's sales \$13,000; no cutting in prices; will invoice about \$3,500; good reason for selling. Address "Saloi," this office.

FOR SALE.—Handsome ash soda counter (7 feet with alab and copper sink, complete; cost to build \$45; good as new. Photo and particulars of H. J. Baringer, Jr., Chatham, N. Y.

DRUG STORE FOR SALE.—One of the nicest and best equipped drug stores in central Pennsylvania; best location in town; between depot and post-office (one minute walk from either); 6,000 inhabitants, with good surrounding country; three other stores in town; store 30 by 18, laboratory 16 by 16; cheap rent; established 10 years and well advertised; several good paying proprietary articles; no cutting; full price for everything. The amount I have paid for goods bought from Jan. 1 to Dec. 30, 1893, are as following:

Shoemaker & Busch (for drugs).....	\$2,441.48
Allen (for alcohol).....	639.89
Segars.....	405.89
Miscellaneous (perfume, soap, brushes, sponges, etc.).....	1,308.76

Total.....\$4,796.02  
Will inventory over \$3,000, not including \$225 National cash register, six months in use; will sell all and good will for \$3,500; good soda trade; both gas and electric light; fans and watermotor; reason for selling, am going in hotel business in same town and just one block from drug store. H. W. Leister, Huntingdon, Pa.—2.

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

Drugs, Chemicals, &c.			
Acetanilid, bulk, per lb.	.35%	0	.34
" " " " " " " "	...	...	.58
" " " " " " " "	...	...	.06%
Acetate of lime:			
Brown, per 100 lb....	.90	0	.95
Gray, per lb.....	.02%	0	.02%
Acids:			
Acetic Com'l pr 100 lb	1.87%	0	1.81%
Aquaforis, 30 deg....	.03%	0	.03%
" " " " " " " "	.03%	0	.04%
Benzoic, German.....	.47	0	.54
" " " " " " " "	.09	0	.09%
Boracic, Whole.....	.13%	0	.14
" " " " " " " "	.13%	0	.14
Citric, American.....	.43%	0	.44
" " " " " " " "	...	...	...
Carbolic Crystals....	.13%	0	.17%
bulk, bottle.....	.90	0	.81
Muriatic, 30 deg....	.85	0	.85
Nitric, 38 degrees.....	.03%	0	.04%
" " " " " " " "	.04	0	.04%
Oxalic, English.....	.06%	0	.07
" " " " " " " "	.06%	0	.06%
Picric.....	.86	0	.86%
Salicylic.....	1.00	0	1.28
Sulphuric.....	.70	0	1.00
Tartaric, Crystals....	.24%	0	.83
" " " " " " " "	.24%	0	.83
Tannic.....	1.05	0	1.80
Alcohol, Grain, per gal.	.84	0	.88
(Less rebate).....	...	...	...
Wood, 95/97%.....	.90	0	.95
Alcohols.....			
Alum, Lump, per 100 lb.	...	...	1.75
Ground, per 100 lb....	...	...	1.80
Antifebrine per oz.....	.10	0	.80
Antopyrine, per oz.....	1.80	0	1.40
Arrow root, Berm., lb..	.84	0	.85
St. Vincent, in bbl., lb.	.11	0	...
Aromatic:			
Red Saxon, lb.....	.06	0	.06%
White.....	.02%	0	.03%
Balsam, Copaiba, lb....	.34	0	.40
Fir, Canada, gal.....	3.75	0	.85
Fir, Oregon, gal.....	.80	0	.85
Peru, lb.....	1.25	0	1.50
Tolu, lb.....	.85	0	.87
Bark, Buckthorn, per lb.	.07%	0	.09
Cascara Sagrada, lb....	.05%	0	.11
Elm, lb.....	.10%	0	.11
Orange peel.....	.06	0	.07
Sassafras, per lb.....	.06%	0	.07
Soap, lb.....	.04%	0	.04%
Bicarb. Soda, Engl., lb.	.03%	0	.03%
Domestic, lb.....	2.90	0	3.00
Bichromate, Pot'h, lb.	.10%	0	.11
Bismuth, Sub. Nit.,	...	...	...
per lb., bulk.....	1.95	0	2.00
Bismuth, Sub. Carb.,	...	...	...
per lb., bulk.....	2.85	0	2.90
Blench'g Powd., per lb.	.03%	0	.03%
Blue Vitriol, lb.....	.03%	0	.03%
Borax, refined, lb.....	.07%	0	.08%
Concentrated, lb.....	.07%	0	.08
Bristomene, best ad, ton	19.50	0	20.00
Bromide Pot'h, Do-	...	...	...
mestic, b'lk, lb....	.37	0	.38
bottles, lb.....	.45	0	.46
Bromide Ammonium,	...	...	...
bulk.....	.45	0	.46
Bromide Sodium, b'lk..	.42	0	.43
Bromine, bulk.....	.43	0	.45
Burgundy pitch, per lb.	.08%	0	.08%
Cacao Butter:			
16 lb. boxes, lb.....	.32%	0	.34
" Dutch A., per lb.....	.33%	0	.34%
Caffeine.....	8.40	0	8.50
Camphor, red'd, bbls, lb	.45	0	...
casea, lb.....	.46	0	.48
Cantharides Chinese, lb.	.98	0	.99
Russian, lb.....	.70	0	.75
Carb. Ammonia.			
casks, lb.....	.08	0	.08%
Casta Buds, lb.....	.18%	0	.19
Castor Oil, cases, lb....	.15	0	.15%
Barrels, lb.....	.14%	0	.15
Caustic Soda, 70%, 100 lb	2.80	0	2.87%
Caustic Soda, 60%, 100 lb	2.90	0	3.10
Chalk, Engl. Precip.,	...	...	...
bulk, lb.....	.04	0	.06
Chloral Hydrate Crystals, bulk, per lb.	.95	0	1.10
Hydrate crusta, bulk,	...	...	...
per lb.....	.90	0	1.05
Chlorate Pot. Crya., lb.	.14%	0	.14%
Pow'd, lb.....	.14%	0	.15
Chloroform, Bulk, lb..	.50	0	.55
Cinchonidine, Sulphate	...	...	...
of German, oz.....	.08%	0	...
Citrate, U.S.P. Iron, lb.	...	0	.59
Soluble.....	...	0	.59
Iron and Ammonia, lb.	...	0	.90
Iron and quinine.....	1.50	0	1.55
Iron and strychnine.	2.00	0	2.05
Phosphate, U. S. P., lb.	...	0	.57
Pyrophos. U. S. P., lb.	...	0	.55
Pyrophos, Soluble, lb.	...	0	.55
Potash, per lb.....	...	0	.40
Soda, per lb.....	...	0	.40

Cobalt, pow'd, lb.....	.28	•	.28
Cocaine Murate, per oz.	4.75	•	4.95
Codine, bulk, oz.....	4.15	•	..
Codine, eight.....	4.65	•	..
Cod Liver Oil, Nor- wegian, bbls.....	19.75	•	25.00
Colocyath:			
Trieste, lb.....	.27	•	.38
Spanish.....	.30	•	.34
Copperas, per roo lb....	.50	•	.80
Cor. Tartar, Crystals, lb.	.18	•	18%
Powdered, lb.....	.18%	•	18%
Cube Berries Z.A., lb.	.10%	•	.28
Ordinary, lb.....	.17%	•	.18
Cutch, bales, S.M., lb..	.04%	•	.05
Cutch, boxes lb.....	..	•	.09
Cuttle bone, Trieste, lb	.11	•	11%
Jewellers' lb.....	.35	•	..
Dextrose.....	.04%	•	.05
Divl Divl, per ton.....	60.00	•	65.00
Dragon's B'd, lump, lb.	..	•	..
In reeds, lb.....	.45	•	.50
Epsom Salts, per roo lb.	1.20	•	1.30
Ergot:			
G'm'n and Russ'n, lb.	.26	•	.30
Spanish, lb.....	.30	•	.32
Ergotine, Domestic.....	..	•	4.00
German.....	4.00	•	..
Flowers:			
Arnica Flowers, per lb	.20%	•	.11
Chamomile.....	..	•	..
German, New, lb... .	.20	•	.24
Roman, New.....	.20	•	.18
Roman, lb., old.....	.18	•	.20
Lavender, Ordinary, per lb.....	.04	•	.08
Select, per lb.....	.15	•	.05
Gambier, lb.....	.04%	•	.04%
Glycerin, bbls, lb.....	..	•	13%
cases, lb.....	.14	•	.10
Glacina, Paradise, lb....	.06%	•	.07
Guarana, lb.....	.95	•	1.00
Gums:			
Aloes, Barb, lb.....	.06	•	.12
Cape, lb.....	.05%	•	.06
Curacao, lb.....	.05%	•	.03
Socotrino, lb.....	.05%	•	.09
Arabic 1st picked.....	.47%	•	.55
sd " " " " "	.34	•	.36
Arabic, sorts.....	.14%	•	18%
Anafostida, lb.....	.14	•	.25
Benzoin, lb.....	.30	•	.35
Chicle, lb.....	.20	•	.30
Gamboge, lb.....	.52	•	.54
Guaial, lb.....	.16	•	.22
Kino, lb.....	.75	•	1.00
Mastic, lb.....	.57	•	.67%
Myrrh, lb.....	..	•	.32
Olibanum, sorts, lb....	.05%	•	.06%
tears, lb.....	.11	•	.13
Sandrac, lb.....	.29	•	.30
Senegal, picked, lb....	.11	•	.10
sorts, lb.....	.09%	•	.10
Shellac, DC, lb.....	.34	•	.35
VSO, lb.....	.31	•	.32
Diamond I, lb.....	..	•	.27
SS, lb.....	..	•	.27
TN, lb.....	..	•	.27
Garnet.....	.24	•	.25
Bleached, lb.....	.30	•	.31
Tragacanth, Aleppo, lb.	.30	•	.56
Harlem Oil.....	..	•	.28
Indigo, lb.....	.45	•	1.05
Insect Flowers.....	.19	•	.20
Insect Powder, pure, lb.	.16	•	.20
Iodide Potash, bulk, lb.	1.75	•	2.80
bot's, lb.....	1.83	•	2.98
Isinglass, Am'n'r, lb..	.27%	•	.60
Japan, lb.....	.35	•	..
Juniper Berries, lb.....	.05%	•	.03
Leaves:			
Belladonna, per ..lb.	.00%	•	.11
Buchu, short, lb.....	.12	•	.14
long, lb.....	.25	•	..
Coca, prime, lb.....	.14	•	.38
Damiana, lb.....	.13	•	.16
Hyoscyamus.....	.07	•	.08%
Iaborandi, lb.....	.25	•	.30
Senna Alex nat'l, lb..	.18	•	.25
Senna Alexandr' lb.....	.22	•	.27
Senna Tinney, lb.....	.06	•	.18
Stramonium.....	.05%	•	.08
Licorice, M. & R., lb..	.24	•	..
Lupulin, German.....	.45	•	1.75
Lycopodium, lb.....	.52	•	.59
Manna, large flake, lb..	.82	•	.85
Small flake, lb.....	.34	•	.36
Menthol, Japanese.....	5.50	•	6.00
Mercurials:			
Blue Pill, lb.....	.32	•	.34
Calomet, lb.....	.71	•	..
Cor. Sublimat, lb....	.62	•	..
Mercury and Chalk..	.30	•	..
Ointment, lb.....	.28	•	.39
Red Precipitate, lb..	.81	•	..
White " lb.....	.86	•	..
Morphine, bulk, oz.....	1.00	•	2.05
Eightz, oz.....	2.21	•	2.30
Moss, Irish, lb.....	.06	•	.06%
Irish, bleached, lb....	.13	•	.15
Muriate Potash, per roe lb.....	1.76	•	1.85

Naphthalene, Flake, per lb.....	0.35	0.35
Naphthalene, Ball, per lb.....	0.35	0.35
Nitrate Silver, oz.....	4.50	4.50
Nitrate Soda, 100 lb.....	1.85	1.85
Nux Vomica, lb.....	0.35	0.35
Nutgalls, China, per lb.....	.13	.13
Oil, per lb.....	.14	.14
Oils, Essential:		
Anise.....	1.40	1.45
Almonds, Bitter.....	..	7.50
Sweet.....	.80	.43
Bay, per lb.....	3.50	4.00
Bergamot.....	1.75	2.65
Cajeput, Native.....	.35	.45
Camphor.....	.07	.08
Cassa.....	.85	.85
Citronella, Native.....	.84	.84
Clove.....	.58	.55
Copaliba.....	.65	.70
Croton.....	.75	.80
Cubeb.....	1.75	1.85
Ergerion, per lb.....	1.45	1.50
Geranium Chiris.....	4.50	7.50
Lavender.....	1.80	1.85
Garden.....	.40	.40
Lemon, as to brand.....	.95	1.65
Lemongrass.....	..	.70
Musk, per lb.....	7.00	8.00
Myrrane.....	.17	.19
Neroli.....	.35	.48
Nutmeg.....	1.75	2.75
Orange.....	1.40	1.65
Origanum.....	.84	.84
Pepperyal.....	1.00	1.10
Peppermint, bulk.....	2.45	2.60
HGH.....	2.95	3.00
Rose.....	7.50	8.00
Sandalwood.....	..	2.85
Sassafras.....	.36	.40
Sassafras, Artificial.....	..	.85
Spearmint.....	1.60	1.80
Tansy.....	2.50	3.00
Wintergreen.....	1.55	1.60
Artificial.....	.90	..
Wormwood.....	2.15	2.25
Opium, Natural, ca. per lb.....	2.35	2.40
Opium, Ordinary.....	..	..
Jobbing, per lb.....	2.30	2.40
Opium, Powd., per lb.....	3.00	3.10
Phenacetine, per oz.....	.85	1.00
Prussiate Potash, Yellow, per lb.....	.22	.23
Red, per lb.....	.39	.42
Quicksilver, flasks, per lb.....	.45	.46
Quinine:		
Domestic, bulk, oz.....	.25	.27
Domestic, oz.....	.30	.35
German, bulk.....	.28	.28
German, oz.....	.27	.29
Roots, Aconite, lb.....	.09	.14
Althea, cut, lb.....	.16	.18
Alkanet, lb.....	.06	.07
Arnica, lb.....	.12	.13
Belladonna, Ger., lb.....	.28	.28
Blood, lb.....	.05	.06
Calama, lb.....	.07	.07
Calama, bleac'd, lb.....	.07	.24
Colchicum, per lb.....	.11	.14
Colombo, lb.....	.06	.11
Dandelion, Germ. lb.....	.07	.10
Dorema, lb.....	..	.08
Gargal, lb.....	.04	.04
Gentian, lb.....	.03	.04
Ginseng, lb.....	2.50	3.25
Ginger, Jamaica, bld., lb.....	.14	.17
Ginger, Jamaica, unbled, lb.....	.14	.16
Golden Seal, lb.....	.22	.23
Hellebore, powd., lb.....	.07	.08
Ipecac, lb.....	1.25	1.50
Jalap, lb.....	.23	.30
Kava Kava, lb.....	.17	.20
Licorice, select, lb.....	.08	.15
F. & d., lb.....	.05	.12
Lovage, lb.....	.50	.53
Mandrake, lb.....	.03	.04
Orris, Florentine, lb.....	.22	.25
Orris, Verona.....	.12	.15
Pink, lb.....	.24	.30
Rhubarb, whole, lb.....	.25	.60
Sarsaparilla, Hond. lb.....	.28	.42
Sarsaparilla, Mex., lb.....	.95	.10
Senega, lb.....	.39	.41
Serpentaria, lb.....	.30	.35
Valerian, Belgian, lb.....	.07	.07
German, lb.....	.10	.12
Saffron, Amn., lb.....	.40	.48
Spanish, Valencia, lb.....	6.25	6.50
Spanish, Alicante.....	..	4.50
Sol Ammoniac, lump, lb.....	.05	..
Do, Granulated, lb.....	.00	.10
Sal Soda, Eng., 100 lb.....	1.00	1.05
American.....	.90	.95
Saltpeter, crude, per lb.....	.23	.24
Saltpeter, Refined, per lb.....	.06	.08
Seeds, Anise, Ital., lb.....	.10	.11

Seeds, Anise, German lb.	.06	0	.06%
Anise, Star, lb.	.19	0	.03
Canary, Smyrna, lb.	.05	0	.03
Canary, Sicily, lb.	.03	0	.04
Caraway, lb.	.05	0	.05%
Celery, lb.	.15	0	.18
Cardamom, .....			
Aleppy, per lb.	.65	0	.75
Cardamom, Malabar, .....			
per lb.	.75	0	.85
Colchicum, lb.	.11	0	.13
Coriander, lb.	.05	0	.05%
Cummin, lb.	.11	0	..
Fennel, Germ., lb.	..	0	.12
Flax Meal, per lb.	..	0	.02
Foenugreek, lb.	.06	0	.03
Hemp, Russian, lb.	.05	0	..
Mustard, yel. Cal. lb.	.04	0	.04%
Mustard, brown, Cal. lb.	..	0	.04%
Poppy, per lb.	.05	0	.09
Quince, German, lb.	.45	0	.50
Rape, German, lb.	.05	0	.03%
Rape, English, lb.	.05	0	.02
Soap, Castile, Mara, mottled, pure, lb.	.06	0	.06%
White, lb.	.10	0	.10%
Soda Ash, lb., 45% per 100 lb.	1.50	0	1.80
Squilla, white, lb.	.04	0	.06
Sugar Milk, powd., lb.	.10	0	.18
Sugar Lead, white, lb.	.11	0	.11%
Lead, brown, lb.	.05	0	.06
Sulphate Ammonia, per 100 lb.	2.00	0	3.00
Do. Potash, 45% per lb.	1.11	0	1.15
Do., Potash, 90% per lb.	2.20	0	2.15
Sulphur, Roll.	..	0	.01%
" Flour	..	0	.01%
Spirits Nitre, U. S. P.	.39	0	.40
Spirit Ammonia, Arom.	.44	0	.45
Sulphuric Ether	.54	0	.61
Sumac, Sicily, ton.	75.00	0	80.00
" Virginia	47.50	0	40.00
Tar Barbadoes, gal.	..	0	.45
Tin Crystals, bbl., per lb.	.13	0	..
Jars, per lb.	.15	0	..
Tomka Beans, Angost., lb.	1.70	0	1.85
" Para, lb.	.45	0	.60
" Angostura	1.70	0	1.85
Turpentine, Spirits	.30	0	.30%
Vanilla Beans, lb.	6.00	0	13.00
cut, lb.	4.75	0	6.00
Venice Turpentine, barrels, lb.	.18	0	.20
Cans, lb.	.10	0	.02
Wax, Brazil, Veg., lb.	..	0	.23
Japan, lb.	.08	0	.08%
Zinc Oxide	.30	0	.48

## Animal and Vegetable Oils.

Linseed, raw, gal.	..	0	.47
boiled, gal.	..	0	.51
Lard, City Prime, present make, gal.	.70	0	.72
City, Extra No. 1, gal	..	0	.53
City, No. 1, gal.	..	0	.45
West, prime, gal.	.70	0	..
Cotton-seed, Crude, off grades, gal.	.26	0	.28
Summer Yellow, prime, gal.	.36	0	.37
Summer Yellow, off grades.	.34	0	.35
Winter Yellow, gal.	..	0	..
Prime White, gal.	.39	0	.40
Sperm, Crude, gal.	.65	0	.67
Natural Spring gal.	.66	0	.68
Bleached Spring gal.	.71	0	.73
Natural Winter, gal.	.71	0	.73
Bleached Winter, gal.	.76	0	.78
Whale, Natural Winter, gal.	.45	0	..
Bleached Winter, gal.	.48	0	..
Ex. Bl'ch'd, gal.	.49	0	.50
Menhaden, Crude, Sound, gal.	.32	0	.33
Dark, pressed, gal.	.34	0	.35
Light, pressed, gal.	.36	0	.38
Bleached, Winter, gal.	.41	0	.42
Extra Bleached, gal.	.44	0	..
Tallow, City prime gal.	.48	0	.50
Cocoonut, Ceylon, lb.	.05	0	.05%
Cochin, lb.	..	0	.06%
Cod, Domestic, gal.	.38	0	.40
Foreign, gal.	.48	0	.45
Red Elaine, gal.	.39	0	.40
Saponified, lb.	.05	0	.05%
Bank, gal.	.35	0	..
Strata, gal.	.36	0	..
Olive oil, table, in tins	5.00	0	5.48
Com'n, bbl., gal.	.57	0	.60
Neatsfoot, prime, gal.	.66	0	.69
Palm, prime Lagos, lb.	.06	0	.06%

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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## PHARMACISTS AND LIQUOR DEALERS.

SOME time ago we commented in terms of disapproval on the prostitution of pharmacy by liquor dealers in Iowa showing that the Iowa prohibition law has accomplished little toward the restriction of the traffic in intoxicants, beyond changing slightly the conditions under which the traffic is conducted. We find an echo of this in the current number of the London *Lancet*, where in a reference to E. L. FANSHAW's account of the working of the prohibition laws in several States, it is stated that very special prominence is given to the part played by apothecaries and druggists. "Thus in Des Moines, Iowa," to quote from the *Lancet* editorial, "the principal hotel has a drug store attached to it which serves all the practical purposes of a cellar. When a guest orders liquor in the public dining-room it is served as a matter of course, but it comes from the drug store and is entered in his bill as a 'pharmacy.' Even in Portland, the port and capital of Maine, where the law is enforced with considerable vigor, the authorities sell it largely as 'medicine' at the City Agency, and to the public profit. A small throng of patients commonly pass the doors and wait their turn to be served. 'Obliging apothecaries' are to be found almost

everywhere, as well as 'practitioners' who will 'prescribe' whisky from a bottle to ten gallons to be taken as required. As regards the city authorities who treat alcohol as a drug and the apothecaries we feel no special responsibility. The apothecaries of the United States, unlike ours, are pharmacists only, not medical practitioners. They are generally, we believe, a respectable body of men; but we must leave them to the pharmaceutical authorities of their own country."

The pharmacists of Iowa cannot afford to neglect the repeated allusions to the anomalous conditions now obtaining in that State. Action, and action of a positive nature, should be at once taken by the State Commissioners of Pharmacy, who are regarded as the persons responsible for the existence of the saloon pharmacies. It is not possible that investigations begun by them and reported to the civil authorities can be ignored by the latter, and it is to be hoped that some action will be taken soon.

Pharmacy, like a certain well known virtue, is often made to cover a multitude of sins, and so we find in other States besides Iowa that intoxicating liquors are dispensed without license from the State with the barest attempt at secrecy using "medicine" as a shield. The really responsible parties are of course the civil authorities, but these place so much trust in the good faith of pharmacists that it behooves State boards and other organized bodies to co-operate with them and aid in detecting offenders against the State laws bearing on the sale of intoxicating liquors.

## TUBERCULOSIS CONTAGIOUS.

THE theory that tuberculosis is contagious was advanced some years ago, and this theory has gradually gained ground despite the apparently contradictory facts which have been noted as bearing upon it. It is interesting to note, therefore, that after a careful study of the subject, the Health Department of the City of New York have officially announced their adherence to this theory, thus coming into line with many of the most advanced students of epidemiology. So clearly and succinctly are these con-

clusions summarized by Dr. Hermann M. Biggs, the Chief Inspector of Pathology of the Department, that we reproduce the summary in a condensed form below:

The disease known as tuberculosis may affect any organ or tissue of the body. When it affects the lungs it is called pulmonary tuberculosis, or consumption. In this form it causes about one-fourth of all deaths occurring in the human being during adult life, and more than one-half of the entire adult population at some time in life acquire it. It has been proved beyond a doubt that a living germ called the tubercle bacillus is the cause and the only cause of tuberculosis. When these germs find their way into the body they may multiply there, if favorable conditions for their growth exist, and produce small new growths or nodules (tubercles) which tend to soften. The discharges from these softened tubercles containing the living germs are thrown off from the body. In pulmonary tuberculosis the expectoration contains the germs, often in enormous numbers. It has been shown that many millions of tubercle bacilli may be discharged, under certain conditions, in the course of twenty-four hours by one person suffering from tuberculosis. The germs thus thrown off do not grow outside the living human or animal body except under artificial conditions, but they may retain their vitality and virulence for long periods, even when thoroughly dried. As tuberculosis can only result from the action of these germs, it follows from what has been said that when the disease is acquired it must result from receiving into the body the living germs that have come from some other human being or animal affected with the disease; in other words, it can not occur except by *direct communication* from some other individual or animal suffering from tuberculosis.

While the meat and milk of tubercular cattle may be important sources of danger, yet the disease is acquired, as a rule, through its communication directly from man to man. The expectoration of tubercular persons frequently lodges in places where it afterward dries, as on handkerchiefs, clothing, carpets, floors, the streets, and so on. After drying, it is very apt, in one way or another, to become pulverized and float in the air as dust. Pulmonary tuberculosis or consumption (the most common form of the disease) is usually produced by breathing air in which the living germs are suspended as dust. It has been shown experimentally that dust collected from the most varied points in hospital wards, asylums, prisons, hotel bedrooms, private houses, etc., where consumptive patients have lived, is capable of producing the disease. Such dust may retain for weeks and even for months its power of causing the disease, and persons inhaling the air in which this dust is suspended breathe

in the living germs. It should, however, be distinctly understood that the breath of tubercular patients and the moist sputum received in proper cups are not elements of danger, but only the dried and pulverized sputum. The breath and moist sputum are free from danger because the germs are not dislodged from moist surfaces by currents of air. If all discharges were destroyed at the time of their exit, by far the greatest danger of communication from man to man would be removed.

It is a well-known fact that some persons, and especially the members of some families, are particularly liable to tuberculosis. So marked and so frequent is the development of the disease in certain families that the affection has long been considered hereditary. We now know that the disease itself is very rarely hereditary, but that there is inherited a liability to the disease which renders the individual an easier prey to the living germs when once they have gained an entrance.

Where the parents are affected with tuberculosis the children, from the earliest moments of life, are exposed to the disease under the most favorable conditions for its transmission, for not only is the dust of the house likely to contain the bacilli, but the relations also between parents and children, especially between mother and child, are of that close and intimate nature especially favorable for transmission by direct contact. The frequent occurrence of several cases of pulmonary tuberculosis in a family is, then, not to be explained on the supposition that the disease itself has been inherited, but that it has been produced after birth by transmission directly from some other individual.

It follows from what has been said that tuberculosis is a communicable—that is, a contagious germ—disease, and is distinctly preventable. The means which are most certain to prevent its spread from one individual to another are those of scrupulous cleanliness regarding the sputum. These means are largely within the control of the affected individual. It should be constantly kept in mind that it is the sputum and the sputum alone which is commonly the important agent in its transmission.

It is furthermore to be remembered that consumption is not always, or even generally, as was formerly supposed, a fatal disease, but that in a very large proportion of cases, if recognized early, it is a distinctly curable affection. An individual who is well on the road to recovery may, if he does not with the greatest care destroy his sputum, diminish by self-inoculation his chances of recovery.

Based upon these premises it is recommended that every possible effort be made to educate the public up to the fact that every tubercular person may be a source of actual danger to his associates, and his own chances of recovery be diminished, if the discharges from the lungs are not immediately destroyed or rendered harmless. It is also recommended that the city departments treat the disease as to care, isolation, etc., just as every other contagious disease is treated, and the hope expressed that if this be done that some of that ample measure of success may be won which has followed the efforts of the New York City Board of Health with management of other contagious diseases.

The following facts should be especially emphasized:

First, tuberculosis is a contagious disease and is distinctly preventable.

Second, it is acquired by the direct transmission of the tubercle bacilli from the sick to the well, usually by means of the dried and pulverized sputum floating as dust in the air.

Third, it can be largely prevented by simple and easily applied measures of cleanliness and disinfection.

### THE WILSON TARIFF BILL.

“**S**CHEDULE A” of the Wilson Tariff bill received attention at the hands of the Drug Trade Section of the New York Board of Trade and Transportation, at their annual meeting held in the rooms of the Fulton Club, this city, on Thursday, January 18. The Committee on Legislation, to whom the matter was entrusted, presented a report that evinced the care with which the various items included in the proposed bill were scrutinized. The conservative spirit of the members composing the Committee on Legislation was evidently opposed to the sweeping reductions proposed by the Committee of Ways and Means at Washington, as many changes were suggested. Among other items of duty which the Drug Trade Section would like to see amended are: Boric acid from the free list to the dutiable list at 3 cents per pound, and tannic acid to pay a duty of 60 cents per pound instead of 35 cents; alcoholic perfumery to be raised from 25 per cent. ad valorem to 50 per cent. Ammonium carbonate should remain on the dutiable list at the present rate of 1½ cents per pound, and also refined camphor 4 cents per pound, the present rate. A duty of 40 cents per pound instead of 35 cents as proposed is suggested on sulphuric ether, while on castor oil they urge a duty of 60 cents per gallon, which is a considerable reduction, instead of the duty of 35 cents per gallon proposed. On cod liver oil a specific duty of 15 cents per gallon is recommended instead of the proposed ad valorem duty of 20 per cent. Exception was of course taken to the general replacement of specific duties with ad valorem rates for reasons which are now very generally known by the trade and which the committee express as follows:

The articles being imported in comparatively small quantities, the argument about false weighing does not apply, and the experience of many years proves that specific duties favor the importation of purer and higher grades of drugs, chemicals and medicinal preparations, which is certainly in the interest of public health, while ad valorem duties favor the unscrupulous importer, and induce false invoicing by dishonest parties.

The election of officers was proceeded with at this meeting and resulted in the selection of the following: Chairman, THOS. F. MAIN; vice-chairman, JOHN M. PETERS; secretary, WM. S. SCHIEFFELIN, and treasurer, W. D. FARIS.

### THE INTERNAL REVENUE TAX.

THE latest phase of the internal revenue tariff is shown in the report of the majority of the Way and Means Committee of the House of Representatives which was made public on Monday of this week.

The most interesting feature of the bill is that which relates to the tax on spirits. The new bill proposes to raise the tax on alcohol from the present rate of ninety cents per proof gallon to one dollar. As it now stands the bill is to go into effect the second calendar month after the passage of the act, and the higher rate is to be paid on all spirits in bond at that date. That the committee would ultimately recommend an increase was prophesied some months or more since in our last editorial upon this subject.

The original proposition, which was to double the tax, making it one dollar and eighty cents instead of ninety cents per gallon, met with the most severe criticism from disinterested business men all over the country. The grounds for that opposition, as we have already outlined, are: First, that it would impose an additional and unfair burden upon all those branches of the arts and manufactures in which alcohol is consumed; and second, that it would be nearly three years before the government would receive any of the increased taxation. The change to an increase of ten cents per gallon only puts a somewhat different phase upon the matter so far as the probable receipts to the government from the increased tax are concerned. Where a difference of ninety cents per gallon was involved it could safely be predicted that almost if not quite every gallon of spirit in bond would be immediately taken out at the lower rate of tax, and that the holders would then add on the amount of the increase or at least a large portion of the increase when selling it. As the amount of spirits of all kinds in bond are sufficient to last for over two years it follows that until this was used up the government would receive the higher tax on but a merely nominal quantity of spirits. The difference between the old tax and the new, amounting in the aggregate to something like \$90,000,000 on the amount of spirits in bond at the present date, would go then not into the treasury but into the pockets of the manipulators and distillers controlling the stock.

The injustice of charging a high tax on an article of prime importance in manufactures as is alcohol remains just as great so far as principle is concerned, whether the tax is raised ten cents or ninety cents or not at all. There is no claim made that medicine should be taxed, but alcohol used in the arts is taxed merely because if it were used as a beverage it is a luxury. There certainly must be some way by which we can have free alcohol for medicine and the arts without having free as a beverage. Other countries have found methods of obtaining it. Why cannot we of the United States do so?



Written for the  
American Druggist and Pharmaceutical Record.

## PRACTICAL PHARMACEUTICAL NOTES.

BY GALEN JR.

### THE CARE OF WATERS.

When the new Pharmacopoeia adopted the imported rose water and orange flower water it did, in my estimation, a wise thing. But the directions given for keeping are very faulty. It is perfectly proper to keep them in dark cool places. But unless they are allowed to air occasionally they will smell moldy and have little resemblance of the flowers from which made. The writer has now two demijohns of imported rose water from the well-known house of Schimmel, in Leipsic, Germany.

When received and opened they did not smell much like rose water, but after three or four days airing they become once more the elegant rose water that they are. It is my practice to allow them to remain open at least one or two days in a month. It does away entirely with the musty odor and brings out strongly the delicate flavor of the rose.

This is not only true of rose water but of many others and distilled water will keep much better in a cool place with a piece of cheese cloth tied over the mouth of the demijohn than if tightly corked.

Some years ago the writer had two barrels of natural spring water from one of the most popular springs. One was left open with a cloth over bung to keep dust out; the other was closed. After laying in cellar all Winter side by side, in the Spring the one left open was found in perfect condition, while the other was spoiled.

### SOAP LINIMENT THAT WILL NOT PRECIPITATE.

Some time ago George Beringer recommended a neutral oleate of sodium made by neutralizing oleic acid with sodium hydrate as much superior to soap (white castile) in making oleates. In this formula he has given the pharmacist not only an excellent means of preparing oleates but also a ready means of preparing camphorated soap liniment, a soap that will remain in solution in the solvent and not congeal. I have already suggested the use of a soap made in this manner for the purpose, but did not have in mind the formula above. By using the formula as given by Mr. Beringer in his article in the preparation of oleates and not diluting the resultant soap, but placing it in a suitably shaped vessel to become cool, a hard soap results which can be used either for making soap liniment or solution of oleate sodium, and is perfect for either.

The formula for such soap is as follows:

Oleic acid.....	1,000 grs.
Caustic soda.....	.60 grs.
Water.....	2 ozs.

Dissolve the soda in the water and mix gradually, with constant stirring, heat moderately, and when saponification is complete set aside to cool.

This forms a hard soap, and if poured into frames can be made into bars. If it is desired exactly neutral the alkali must be added gradually, and only enough added so that a little of the soap dissolved in alcohol and a few drops of solution of phenolphthalein added the color should remain a *very light pink*. This is not much more trouble to make than the first and is much better, especially for making oleates.

### LANOLINE GLYCERITE.

During this season of the year there is always a demand for glycerin preparations or preparations of similar kind. One of the best of these can be made by taking

Glycerate of starch, U. S. P.....	3 ozs.
Lanoline.....	3 ozs.

Rub the lanoline in a small portion of glycerate until thoroughly mixed, then add the glycerate gradually, rubbing thoroughly after each addition.

By being careful an elegant emolient is obtained that can be flavored to suit.

### STEARIN JELLY.

By using the following an excellent preparation is obtained:

Stearic acid.....	50 grains
Carbonate of sodium.....	30 grains
Glycerin.....	30 ounces
Mucilage of quince seed.....	

Dissolve the sodium in the glycerate and add stearic acid cut in fine pieces, heat gradually. When effervescence ceases add 8 ounces of mucilage of quince seed (1 ounce to 1 pint), and mix thoroughly. This is also an excellent preparation.

### COUGH MIXTURE.

One of the most excellent preparations for a cough which the writer has ever seen can be made by the following recipe:

Fluid extract of wild cherry.....	6 fl. ounces
Fluid extract of white pine.....	6 fl. ounces
Fluid extract of cubebs.....	3 fl. ounces
Fluid extract of ipecac.....	1 fl. ounce
Chloroform.....	3 drachms
Morphine acetate.....	24 grains
Ammonium chloride.....	2½ ounces
Sugar.....	7 pounds
Water.....	4 pints
Syrup tolu, a sufficient quantity.....	
Acetic acid, a sufficient quantity.....	

Add the fluid extracts to water and agitate thoroughly; allow to stand for an hour or more, and filter clear, adding to contents of filter 2½ ounces ammonia chloride. The ammonia will all be dissolved by the liquid in passing through. Then dissolve in the filtrate 7 pounds sugar by cold percolation, and to this add 8 drachms chloroform; agitate thoroughly until admixture is perfect. To the syrup add 24 grains of morphine acetate previously dissolved in a small amount of water, and acetic acid, q. s. to make clear. Make up to 1 gallon by adding syrup tolu of the new Pharmacopoeia.

Written for the  
American Druggist and Pharmaceutical Record.

## "LET US REASON TOGETHER."

BY WILLIAM B. THOMPSON.

In the course of a published article advocating the "Training of the Shop," in a previous issue of this journal for the education of apothecaries, reference was made, in demonstrating the truth of argument, to the histories of typical pharmacists,—men whose whole and sole education was the outcome of a practical experience in the precincts of the shop. These rose to fame and honor—yet, the years of their novitiate gave no evidence of genius, and the circumstances which environed them served not to discourage but to stimulate their successful striving.

It is, perhaps, needless to say that one of these was Scheele, the Swedish apothecary. Yet with the somewhat minute facts of the life and history of Scheele, unmistakably showing that his vocation was that of an apothecary, a most esteemed contemporary and able writer on the subject of education of pharmacists resists the force of this example, and declares that Scheele is not to be ranked

with apothecaries but with chemists! "His (Scheele's) fame is that of a chemist, not a pharmacist." The advocates of shop-training might well be satisfied with this construction and conclude that if the mere occupation of the apothecary will develop the genius of such a chemist, then truly, is the education of a shop to be preferred above all other means. But had Scheele never become a pharmacist is it likely he would ever have become a chemist? The declaration above referred to, however, coming from responsible source through the columns of a widely read journal is calculated to cast some shadow upon the pharmaceutical escutcheon, as well as upon the pride and ambition of a struggling tyro, in the confines of the shop. He should rather be encouraged to emulate his bright exemplar and to link another name to fame and pharmacy.

The history of the sciences is ample in showing how close and intimate is the connection between pharmacy and chemistry. Then why try to disassociate them? Indeed it is quite possible to prove that the compounding of certain medicaments was the foundation of both chemistry and physic, for it was the means of directing attention (Scheele's case precisely) to the character of the various products of nature. To prove that the art of compounding was not to be taught by ephemeral or pre-arranged methods we may quote the words of an Arabian writer of the eighth century, one "Serapion," who says, "For him who wishes to compound medicines as he ought, it is necessary that he should understand their virtues profoundly."

We have referred above to the life and history of Scheele, and the more we ponder the greater the amazement becomes for the man, and for the opportunities which a practical pursuit of pharmacy presents to the mind of inquiry, and to the investigator. Observation would seem to point to the fact that a just conception of what pharmacy includes as a science is best impressed upon the mind and understanding by a direct and constant familiarity. The chosen steps of approach being across the threshold, and *ab initio*. This is strikingly impressed in the narrative of Scheele's history. The family necessities compelled the parent to place his boy at an occupation at the age of 14. An acquaintance existing between the father and an apothecary of the town, this business was chosen and the youth entered his apprenticeship. His first impression was that of wonder, curiosity became next aroused, and investigation followed. The products of the three kingdoms of nature were stored away in the receptacles of that shop!—and the rest is a matter of familiar history: knowledge was enriched; the mysteries of science were unfolded; elements were placed at command, and the hidden forces of nature revealed; all at the hands of an apothecary's apprentice in the obscure shop of an inland village.

No collegiate walls ever encompassed him; no theoretical instruction was bestowed; yet note what boy and man became. How much more learned and eminent he might have become is not to the present purpose to surmise. What he did was accomplished with the means at command. What he did can again be done with advantages greatly multiplied, but the niche of fame occupied by Scheele is a place of honor so completely filled by the achievements of the man that no additional luster can be shed upon that name.

When the question is asked whether the

American drug stores of to-day are the most favorable nurseries for scientific men, we might say that the opportunities of the drug store have been shown; these opportunities still exist—we want the encouragement to foster these opportunities, and we want the votaries of pharmacy to assume the responsibilities of education to a greater degree, and not to delegate to or permit an usurpation of that responsibility by methods which can neither avow it, nor assume it.

## Pharmaceutical Progress.

**Phenyl-xylyl-ethane.**—A complex mixture of the sulphonic acids of this body, and its homologues, combined with potash, is being used as a disinfectant.

**Sophorin**—This alkaloid, obtained from different species of sophora, was obtained by Plugge from the seeds of *sophora tomentosa*, L. and proven to be identical with cystisin.

**Herman Janke's Hair Dye** (*ne plus ultra*) consists of an alcoholic ammoniated silver nitrate solution and an alcoholic pyrogallol solution.—*Pharm. Post*, 1893, 687.

**Ozalin** is a fancy name for a new disinfectant. Apparently it is nothing more than calcium, magnesium and iron sulphates, with burnt lime and magnesia.—*British and Colonial Druggist*.

**Loretin**, which is chemically known as meta-iodorthoxychinolin and sulfonic acid, occurs as a beautiful yellow crystalline powder strongly resembling iodoform. It is completely inodorous.—*Pharm. Post*.

**Thiol in Skin Diseases.**—Dr. Laughlin (*Geneeskundige Courant*, 47, 1893, 17) in herpes uses a 25 per cent. watery solution, two times daily. He considers it superior to ichthyol in many cases on account of its being without odor and non-irritating.

**Vanillin from Cloves.**—Jorissen and Harris obtained upon extraction of cloves with ether and subsequent treatment a white crystalline mass of a strong odor of vanilla, soluble in ether, alcohol and ether, melting at 79° and subliming without residue.—*Pharmaceutische Post*, 1893, 637.

**Peru Balsam Copaiba.**—F. Musset (*Pharm. Centralt.*, 1893, 720) considers the lime test very valuable. He mixes about equal parts of stiff milk of lime with the suspected balsam and obtains at once a crumbling mass which on warming changes to a friable powder.

**Standardization of Fehling's Solution.**—A. Bornträger (*Zeitschr. f. Angew. Chem.*, 1893, 600) prepares a 0.5 per cent. solution of invert sugar as follows: Take 19 grammes saccharose, add water and 10 Cc. HCl (of 1.188 sp. gr.) or 20 Cc. (of 1.10 sp. gr.); make up to 100 Cc. Allow to stand for 24 hours. Take 25 Cc., neutralize; make up to one liter.

**Thermodin**, or acetyl-ethoxy-phenylurethane, is a near relative to neurodin, and possesses a quite similar action. It crystallizes in white needles, odorless, and almost tasteless, melting at 86°–88° C., and but slightly soluble in water. It is useful in cases of typhus fever, and reduces the temperature from 2.5°–3.0° C.

**Bulgarian Otto of Rose.**—The researches of Markownikoff and Reformatsky (*Jour. f. Prakt. Chem.*, 1893, 48) show that the principal portion of the elceoptene of otto of rose is an alcohol of the formula  $C_{15}H_{30}O$ . It belongs to the allyl alcohol series and is isomeric with allyldipropylcarbinol and allyldipseudopropylcarbinol.

**Sensitive Test for Tannic Acid in Urine.**—Rosin uses a dilute tr. iodi made by diluting 10 Cc. of the official tincture with 100 Cc. alcohol. A few Cc. of this solution are added to the urine so as to form a layer. If the urine contains tannin the separating layer will be colored in one minute greenish, which color is often retained for an hour.—*Apoth. Zeit.*, 1893, 641.

**Bacillus of Soft Chancre.**—Dr. Unna (*Deutsch. Med. Wochenschr.*, 1893, 19) demonstrated to the Medical Society of Hamburg that he had found the same bacillus in five typical cases of chancre. It is a strepto-bacillus occurring in long chains, and meanders with the plasma cells and leucocytes. It may be detected by its stain with an alkaline solution of methylene blue.

**Copaiba** has been found to act as a powerful diuretic, especially in cirrhosis of the liver, by Dr. Bronowsky, who administered in twenty-four hours 6 gm. in emulsion with extract of peppermint. Copaibaic acid was passed in the urine after the first day of the treatment, while the maximum diuretic action was reached on the third or fourth day.—*Gaz. lek.*, through *Nouv. Remèdes*, 1893, p. 504.

**Rape oil** consists, according to Reimer and Will, of the glycerides of three distinct fatty acids, one of which, melting at 75°, occurs only in very small quantities. The other two, erucic and a liquid acid which the author's name rapinic acid, are present in equal quantities. Lead erucate is readily soluble in hot ether. The zinc salts of the fatty acids can be separated by means of ether.—*Deutsch. Chem. Gesell.*

**Esters of Narcein.**—Martin Freund, of narcein fame, has patented some of these compounds, which are likely to find use as medicinal remedies. Narcein,  $C_{21}H_{31}NO_8$ , contains a carboxyl group in which the OH is capable of substitution by alkyl radicles. For example, the hydrochlorate of narcein-methyl-ester crystallizes from water in rectangular tables, melting at 150° C.; the corresponding ethyl ester melts at 205°.—*British and Colonial Druggist*.

**Neurodin** is acetyl-p-oxyphenylurethane of the formula



It is used as a specific for neuralgia in doses of from .5 to 1.5 grammes. It reduces the temperature from 2.5 to 3.0°. It occurs in white odorless crystals, very slightly soluble in water (1 in 1,400 at 15° C.), and melting at 87° C.—*British and Colonial Druggist*.

**Resol.**—This is the name of a new disinfectant which has been introduced in Germany. Creolin appears to be its prototype. It is made by saponifying 1,000 parts of wood-tar with 9 parts of caustic potash, and adding 200 parts of an indifferent body, such as wood spirit. Resol, which is proprietary, is said to be an active bactericide, killing typhoid, anthrax, and similar bacilli in five or ten minutes with 8 per cent. solution.—*Chemist and Druggist*.

**Phosphorus** is prepared by a process patented by Rosell, of Bern, by which glacial phosphoric acid or alkaline metaphosphates are heated with metallic zinc or aluminum, the metals dissolve in fused acids or its salts, and phosphorus distills over; this reaction takes place at a low red heat, whereas in the older process of reducing the metaphosphate with carbon

a very intense heat was necessary.—*Südd. Apotheker Ztg.*, 1893, 538.

**Copaiba Varnish.**—An excellent, elastic varnish may be made (*Mitt. f. techn. Mater.*) by mixing equal parts, by volume, of copaiba and strong alcohol and allowing to stand until clear (or if needed at once, filtering) and then adding to each 50 parts of the clear solution 5.2 parts of castor oil. This varnish must not be used on any paint containing alcohol soluble resins such as sandarac, mastic, etc. In this case turpentine oil can be substituted for the alcohol, though with turpentine there will be no separation of the impurities.

**Pithecolobium**, obtained from pithecolobium saman, benth., (mimosaceae) a shade tree of coffee plantations in Japan. It is identical with the other alkaloids obtained from other species of pithecolobium. Previously (*Apoth. Zeit.*, 1891, Rep. 29) Plugge called it an alkaloidal sapotoxin. To the taste it is burning. It is highly poisonous and agrees with those alkaloids whose aqueous solutions become milky upon warming and that froth upon shaking. The physiological action of this substance agrees with those made by Plugge upon his sapotoxin.—Greshoff in *Pharm. Weekblad voor Neder.*, 1893, Nos. 28 and 31.

**Soda Production in Siberia.**—According to Dr. S. S. Von Zaleski, of Toussk, the Barabiscian and Kulusidian steppes are well supplied with plants adapted for the production of soda, the more important of which are members of the genera atriplex, salicornia, nitaria, statice gmelini, salsola and chenopodium. The cut and dried plants themselves furnish the necessary fuel. These plants can, so the professor thinks, also be cultivated with profit for the production of soda on the vast salt steppes which are at present inhabited only by nomadic tribes.

**The Clyster in Africa**—In the course of a recent exhibition of photographs taken in Africa, as *Progrès Médical* recounts, M. Marcel Monnier showed an African method of administering enemata. The implement employed is made of a gourd with two reeds stuck into it on opposite sides. The sick person reclines on an assistant's knees in the attitude of a swimmer. One of the reeds is inserted into the rectum, and the operator, taking the other one into his mouth, blows forcibly through it, thus driving the enema out of the gourd and into the patient.

**That quinine salts are incompatible with asapol** has been shown by Edhem Ismail, who says (*Rép. de Pharm.*, 1893, p. 487) that when a solution of a basic or neutral quinine salt (the sulphate or the hydrochlorate) is poured at once into a solution of asapol, a resinous body appears on the surface of the liquid, which is insoluble in water and soluble in 90 per cent. alcohol. If an asapol solution is gradually added to a solution of a quinine salt, a white precipitate is deposited in the bottom of the tube, and becomes soft and grayish.

**East Indian Plant Constituents.**—**Erythrinin** (not to be confounded with the dyestuff erythrin) is an alkaloid obtained from the bark of erythrina (*stenotropis*) broteroi, haask, an Australian tree. This is probably identical with the alkaloid called erythrin, obtained from a Brazilian papilionaceae (erythrina coral-lodendron, L.) called casc de mulunge. The first alkaloid has been examined physiologically by Plugge and found to be useful in poisoning by strychnine. In its action it much resembles that of cystisins, the alkaloid of cystisus kaburnum, with which, however, it is not identical.

**Iodocaffeine and Iodotheobromine**—Rummo states (*Sem. Med.*) that these are compounds of the respective alkaloids with sodium iodide. The first named is made by dissolving 85 parts of sodium iodide and 65 parts of caffeine in cold water, treating with sulphurated hydrogen and evaporating to dryness. The substance is obtained in colorless crystals, while iodotheine is obtained as a white powdery mass. Iodotheobromine is made by the addition of a mixture of sodium iodide and theobromine to a concentrated solution of sodium salicylate. This, we should think, will produce a compound closely allied to diuretin, and it is obvious that the author works by unscientific methods.

**Mercury in Mercury Salts.**—The following results have been obtained by Fischer theoretically and Bocquillon practically.—*Pharm. Post*, 1898, 687.

	Bocquillon.	B. Fischer
Albuminate.....	70.80	.....
Chloride.....	73.80	73.80
Iodide.....	75.00	44.10
Chloride (mild).....	84.00	85.30
Cyanide.....	.....	79.36
Iodide (red).....	.....	6.17
Lactate.....	67.10	.....
Oxide.....	92.59	92.60
Peptonate.....	57.15	.....
Phenylate.....	51.68	.....
Salicylate.....	50.00	.....
Succinate.....	63.30	.....
Sulphide.....	.....	86.30
Tennate.....	51.80	.....

**Detection of Sesame in Olive Oil.**—Musset (*Pharm. Centralh.*, 1898, No. 49) adds 0.1 gramme of dried phosphorus to 10 grammes of the suspected oil and places it in a water bath until dissolved. The resulting mixture is placed at a temperature sufficient to keep it liquid. A peculiar striped appearance is given to the surface of the liquid. If the sample is pure olive oil a white cloudiness only appears at the end of 24 hours. In a mixture containing but 10 per cent. of sesame oil the stripes are darker, and upon the sides and bottom a clear yellow appearance is observed. On adding ammonia the pure oil is not colored, but a mixture containing sesame oil is colored a deep brown.

**Acetophenone Derivatives.**—The halo gen and amido-compounds of acetophenone are put forward as new remedies, but their use is not yet stated, so far as we can ascertain. Pyrogallol is heated with chlor- or bromo-acetic acid or their salts or esters, and following reaction takes place.



This oxyderivative of chloro-acetophenone reacts easily with bases, giving amido-compounds. Such bases as aniline pyridin, quinoline and methylamine are used, and the resulting compounds are the subject of the patent.—*British and Colonial Druggist*.

**Peculiarity of a Species of Rheum.**—J. C. Koningsberger (*Bot. Zeit.*, 1898, 85) has examined the root of rheum macrorrhizum, mart., and found both large and small groups of a small brownish substance existing in the form of grains. These are apparently formed from one of the elements of the wood which is surrounded by an unusual saturated tissue. The origin of the latter appears to be in a row of cells which border near the woody elements. The lumen of the cells is filled with a resin-like substance, which also impregnates and colors the wall brown. On the addition of KOH a purple coloration is obtained, indicating an accumulation of chrysophanic acid. On longitudinal section these cells, containing this

coloring matter with their yellowish walls, are apparent with a row of cork cells upon either side. This peculiar formation appears to arise from the abnormal thickening of the walls of the wood bundle. In the lumen of these cells the secretion of this substance commences, which destroys the walls and finally breaks through into other cells.—*Apoth. Zeit.*, 1898, 94.

**Characteristic Reaction of Glucose.**—A. Jaworsky (*Pharm. Post*, 1898, No. 47) calls attention to the following reaction as characteristic for glucose: 8 to 4 Cc. of a sugar solution are heated for one minute with 0.12 grammes iodic acid and 0.2 to 0.4 grammes sodium hydrate. The resulting cooled mixture is acidified with dilute hydrochloric acid and cautiously covered with a layer of ammonia. A dark precipitate of iodide of nitrogen is formed.

**Turkish Honey.**—According to Fajans (*Apoth. Zeit.*, 1898, No. 103, 682) this product is consumed in considerable quantities by the lower classes of Austria. It is white, and in fresh condition dry, hard and brittle. On standing in the air it forms a soft, white, smeary mass. The taste is agreeable, afterwards bitter and astringent from the alum. Analysis gave: Water, 7.97 per cent.; invert sugar, 56.78 per cent.; cane sugar, 81.02; ash, 0.31, and 3.92 per cent. insoluble in 80 per cent. alcohol. An analysis of that portion insoluble in alcohol gave: 68.09, organic substance; 27.80, alum; 4.08, gypsum.

Odol consists, according to A. Scheider, of a solution of saccharin and salol in alcohol, perfumed with peppermint and caraway oil.—*Pharm. Zeit.*

**Alkaloids and the Furfural Reaction.**—N. Wendes (*Pharm. Post*, 1898, No. 49) adds a grain of the alkaloid to a porcelain dish in which are two or three drops of a solution containing five drops of furfural and 10 Cc. of concentrated sulphuric acid.

*Veratrin* gives at first an olive green and finally a magnificent blue. On warming a purple violet color is developed.

*Sabadillin* and *papaverin* give a reaction similar to veratrin, not so close, being brownish and dirty violet.

*Digitatin* gives a brown mixture, which on heating becomes red.

*Quinine* gives a dark, greenish-brown mixture, which upon warming turns brown and then green; upon the addition of water the edges are decidedly green.

*Strychnine* gives a dirty brown color, becoming dark green upon heating; on the addition of water it changes to a dirty blue and violet.

*Morphine* and *codeine* are colored reddish brown, on warming changing to violet red; the mixture changes quickly. Aconitin, atropin, brucin, colchicin, coniin and nicotine give reactions that are not decided.

**Chionanthin**, a glucoside from chionanthus virginica, was isolated (W. von Schulz, *Pharm. Ztsch. f. Russl.*, 1898, 579 and 598) by extracting the root with hot petroleum ether; after distilling off the solvent the residue separated white, partly crystalline, partly amorphous crusts, which, after washing with cold alcohol, were dissolved in boiling alcohol, when upon the cooling of the solution the glucoside separated. It is only slightly soluble in cold water and alcohol, but is soluble in hot water and hot alcohol; it has the formula  $\text{C}_{21}\text{H}_{32}\text{O}_{11} + 2 \text{H}_2\text{O}$ , becomes anhydrous at  $110^\circ \text{C.}$ , and at higher temperature is colored red violet, and melts, forming a transparent, glassy mass; dilute acids yield dextrose, and a red-brown resinous substance,

soluble in ether and alcohol; this decomposition is attended by a strong odor, recalling balsam of Peru. A preliminary examination of the bark gave indications of alkaloids with Mayer's reagent and potassium tri-iodide; the aqueous decoction with lead subacetate gave a copious precipitate, which after washing with water and alcohol was decomposed by hydrogen sulphide; after filtering and evaporating a yellowish powder was obtained, soluble in hot water, but precipitating again upon cooling. This aqueous gave the alkaloidal indications; it is soluble in alkalies and alkaline carbonates. Saponin was tested for, but without confirmatory results.

**Germ-Nucleine**—This is the name recently given to a compound or mixture extracted from the spleen cells and other organs. It is said to be a "phosphorated proteine," and, as such, distinguishable from other albuminoid substances. It is a light yellow-colored powder insoluble in water and in alcohol, but soluble in alkaline solutions. In spite of its uncertain composition and nature, Dr. Germain Sée, of Paris, has been using it in injections. According to that writer an injection of two or three grammes (30 or 45 grains) of this substance "will augment the number of white globules acting as phagocytes." It is said to have given good results in certain cases of pneumonia and pleurisy. A more extended reference to germ-nucleine in connection with recent researches of Dr. Victor Vaughan, of Michigan University, will be found in THE DRUGGIST AND RECORD for October 12, 1898.

## Commercial and Technical Names of Chemical Substances.

In the *Pharmaceutische Centralhalle* for 1898, page 718, appears the following:

**Abrastol**—A sulphonated  $\beta$ -naphthol derivative.

**Agnin**—Impure lanolin.

**Agopyrin**—Mixture of salicin, ammonium chloride and sulphate of cinchona (in tablet form).

**Alphol**—Salicylic acid- $\alpha$ -naphthylester. **Alummol**—Aluminum salt of  $\beta$ -naphthol-disulphoacid R.

**Amidol**—Diamidophenol hydrochloride (for photographic purposes).

**Anaspathin**—Mixture of lanolin and vaselin.

**Antacidin**—Calcium saccharate.

**Antibacterin**—Mixtures of crude aluminum sulphate and lamp-black.

**Antibenzinpyrin**—Constitution unknown.

**Antidiphtherin**—Product of the diphtheria bacillus; shown by Klebs.

**Antidysentericum**—Mixture of pelletierin, extract of pomegranate, myrobalsans, extract of rose, and gum in pill form.

**Antifungin**—Boric acid and magnesia.

**Antiphthisin**—Product of tubercle bacillus.

**Antiseptin**—Serum of animals treated with iodine trichloride. (Monobromacetanilid is also given this name.)

**Antispasmin**—Narcein sodium salicylate.

**Antitoxin**—Product of the typhus spirillus. (This name is also given to the products of other bacteria.)

**Apyonin**—Substitute of yellow pyoktans (in France).

**Aquozon**—2.5 per cent. aqueous ozone solution with addition of hypophosphites.

**Benzoparacresol**—Benzoylparacresol.

**Bergamiol**—Linalylacetate (for perfumery).

**Bromamid**—Hydrobromic acid bromanilin.

**Camphor**—Solution of camphor and gum cotton in absolute alcohol.

**Cancroin**—A narcotic solution of neurin with citronic acid in carbolic acid water. (This name was previously applied to a substance obtained from cancer tissue.)

**Cardin (also Kardin)**—Preparation from the hearts of animals.

**Cerebrin**—Substance from brains.

**Chelen (also Kelen)**—Ethyl chloride.

**Chloralamid**—Chloralformid.

**Chloralose**—Condensation product of glucose.

**Chlorol**—Solution containing copper sulphate, corrosive sublimate and chloral.

**Chloryl**—Mixture of methyl chloride and ethyl chloride.

**Cinnamol**—Rectified cinnamon oil.

**Cocainum Phenylcum**—According to Vian a mixture of cocaine hydrochloride and carbolic acid; according to Oefele a mixture of cocaine and carbolic acid; according to Poinot a mixture of cocaine, carbolic acid, paraffin oil and ground nut oil.

## Manufacture of Lithographers' Inks.\*

BY A. M. VILLEN.

By lithographic inks is understood those inks which are prepared for writing on stone. Numerous formulas are extant for these preparations, of which only the best will be mentioned. A lithographic ink must penetrate into the stone and must resist acids. The quantities of the various ingredients depend very largely upon the particular for which the ink is to be used. For instance if one wants to etch deep the ink must contain much tallow. Aside from any of these special cases the general rule given by Lemerrier is that an equal quantity of soap and of unsaponifiable substance should be present. When much tallow is used some black must also be added. Lemerrier uses the following formula:

	Parts.
Yellow wax.....	4
Tallow.....	3
White castile soap.....	13
Shellac.....	6
Light lampblack.....	3

For the preparation of the ink a capsule of cast-iron or copper is used, provided with a cover, and also a ladle and an iron spatula. The substances should fill the capsule only one-third full. The wax and tallow are first melted and the soap added gradually. With each new addition it is necessary to wait until the previously added portion is melted, as otherwise an overflow might occur.

When the whole is melted the shellac is added in small portions at a time. The heat is then raised until white vapors are given off, when the capsule is taken from the fire and the contents ignited, being allowed to burn, if made according to Grammen, for two minutes. It is then extinguished by covering the vessel, and after a few minutes the lampblack added.

It is then allowed to boil again for a quarter of an hour, and after it has cooled somewhat is poured on glued paper smeared with soap.

In order to mix better, the whole should be melted and stirred while melting.

Finally it is poured out upon marble or upon paper. Before it cools thoroughly the mass must be broken into pieces. The

following are prepared in a similar manner:

I.	
Tallow soap (animal fat soap).....	93
Virgin wax.....	123
Mutton tallow.....	68
Light shellac.....	93
Iron oxide.....	30

II.	Parts.
Mutton tallow.....	80
White wax.....	80
Shellac.....	20
Common marbled soap.....	29
Iron oxide.....	0

III.	Parts.
Well dried tallow soap.....	30
Mastic.....	30
Sodium oxide, powdered.....	30
Shellac.....	158
Iron oxide.....	10

IV.	Parts.
White wax.....	80
Tallow.....	20
Tallow soap.....	40
Mastic.....	20
Venetian turpentine.....	10
Iron oxide.....	20

Knecht, a pupil of Senefeldes, is authority for the following recipe:

	Parts.
Yellow wax.....	400
Tallow.....	308
Shellac.....	500
Mastic.....	100
White soap.....	400
Venetian turpentine.....	50
Olive oil.....	50
Iron oxide.....	100

### DESMADYLL'S FORMULA.

	Parts.
Virgin wax.....	40
Mastic.....	16
Shellac.....	28
White soap.....	22
Iron oxide.....	9

### CHEVALIER AND LAUGLUME'S FORMULA.

	Parts.
Wax.....	40
Mutton.....	40
Soap.....	40
Shellac.....	30
Iron oxide in sufficient quantity.	

Another formula is as follows:

	Parts.
Yellow wax.....	100
Tallow.....	40
Shellac.....	100
Mastic.....	10
White soap.....	40
Turpentine.....	10
Linseed oil.....	10
Iron oxide.....	100

The best lithographic ink has the following composition:

	Parts.
Yellow wax.....	15
Tallow.....	10
White soap.....	30
Petroleum.....	5
Shellac.....	20
Mastic.....	7
Linseed oil boiled with Prussian blue.....	3
Iron oxide.....	10

Lithographic inks must be firm and permanent.

They must not be affected by taking a large number of impressions and must protect the stone from the effects of the acid. The influence of the various ingredients upon the character of the ink has been investigated by Jaumac. Inks containing an excess of resin are dry, break with a shining fracture, and are insoluble in the cold. They spread too easily on the stone to produce good results. They may be washed off with oil of turpentine.

An excess of wax causes a too rapid thickening, but the ink is nevertheless good.

An excess of grease makes the ink less firm, while too much tallow renders it less permanent.

A fluid lithographic ink may be made by boiling the following substances together until complete solution results:

	Parts.
Water.....	2,000
Borax.....	70
Shellac.....	60
Tallow.....	40
Yellow wax.....	40
White soap.....	100
Anilin black.....	25
Iron oxide.....	25

Villon has devised a similar formula.

Ink for retouching is made as follows:

	Parts.
White soap.....	100
Tallow.....	100
Yellow wax.....	150
Linseed oil.....	100
Iron oxide.....	80

The following inks are for lithographic drawings and aqua tints.

### ENGELMANN'S FORMULA.

	Parts.
Wax.....	80
Tallow.....	10
Soap.....	60
Shellac.....	60
Iron oxide.....	30

### JOBART'S FORMULA.

	Parts.
Wax.....	10
Hog lard.....	100
Spermaceiti.....	30
Soap.....	10

### HANKE'S FORMULA.

	Parts.
Wax.....	400
Hog lard.....	500
Spermaceiti.....	750
Soap.....	500
Iron oxide in sufficient quantity.	

## Glycerin Suppositories.\*

BY L. A. HARDING, B.Sc., Ph.D.

Not a great many years ago glycerin suppositories were lauded by the medical profession and their merits sung to the world at large until the excitement was raised to so high a pitch that there was scarcely a day passing but what glycerin suppositories were in demand. Then came a time when the enthusiasm suddenly died and nothing was heard about them for a long time, but of late the medical world has again taken up the subject of rectal evacuation and the glycerin suppository has again attained some prominence. Manufacturers have devised special molds (double conical) for which they claim advantages, which, of course, cannot be denied. What glycerin suppositories are is in a measure a difficult question to answer on account of the great variety of ways and processes by which they are manufactured. The most of them which are supplied by the manufacturers are made by the aid of stearin soap, and contain from ninety to ninety-five per cent. of glycerin. Others are castile soap combinations with, of course, only a small percentage of glycerin. Still others are gelatin products, which also contain a small quantity of glycerin only. Every one of us is so well acquainted with the physical appearance of the glycerin suppository that it would be superfluous to enter into its detailed description here.

Chemically speaking, glycerin suppositories are a soap with glycerin as their fillers. Of the many processes in vogue none offer such elegant product, handsome in appearance, and so free from objection as the stearin product. By this method we are able to make a

\*Translated for THE DRUGGIST AND RECORD from the *Bulletin de la Societe Chimique de Paris*.

\*Read at the recent meeting of the Minnesota Pharmaceutical Association.



very firm and perfectly transparent product which will contain ninety-five per cent. of glycerin. I will first give its component formula, and then point out some of its features which it is necessary to observe to insure good results and a creditable product.

Stearic acid.....  $5\frac{1}{4}$  drachms  
Sodium carb..... 1 dram, and 15 grains  
Glycerin..... 5 ounces

Heat the glycerin and stearic acid together, regulating the temperature so as to just melt the stearic acid; when dissolved, stir so as to perfectly mix the mass, then add the carbonate of soda to the mixture, and when dissolved pour into suitable mold to cool. Now let me try to explain the workings of the formula to you so you may thoroughly understand it in case you should be desirous to make your own glycerin suppositories. The product of the above formula should, if we were to let it cool in the evaporating dish, present a perfectly transparent solid, and suppositories made from it should show the same physical characteristics. They will then contain about ninety-five per cent. of glycerin. Should the mass, however, upon cooling, present an opaque appearance the fault may be looked for in two directions. In the first place the amount of sodium carbonate may be deficient on account of the stearic acid of commerce. In this case carbonate of sodium should be added. The necessity of adding carbonate of sodium may be recognized by the fact that they are opaque in color and soft to the touch, somewhat of a lardaceous consistency; the carbonate of sodium should be added, a small quantity at a time, until the desired result is obtained. Should, however, the product be opaque and very firm, glycerin is wanting and should be added until a perfectly clear product is the result. It must further be observed not to use a high degree of heat, not any higher than is absolutely necessary to dissolve the stearin, as otherwise a white foam will rise to the surface, which it is necessary to remove from the clear underlying solution. While this does not interfere with the product itself, it will increase the cost of the resulting product; just as much as there is foam to be removed, precisely the same amount of product is lost, whence the increased cost of the remainder.

The use of the glycerin suppositories for producing a gentle evacuation of the bowels is a recognized fact, also cases are on record where obstinate cases of constipation and stoppage of the bowels have been successfully relieved by incorporating into the suppository, aloin, colocynthin, etc., as the necessity of the case may require.

Urethral suppositories or bougies are likewise gaining much favor among the medical profession, especially in cases of gleet, where they are medicated with F. E. hydrastis, or in fact most any medicament, as there is scarcely a substance that will not thoroughly mix with the glycerin mass and thus cause an even distribution of the medicinal substance through the entire mass.

Now as to the price, you can see for yourself the formula I gave will produce a mixture of about  $5\frac{1}{4}$  ounces, and at the usual weight of suppositories, namely  $\frac{1}{4}$  drachm each, we would have nearly 100 suppositories, costing as follows: Two drachms of stearic acid at 24c. per pound,  $\frac{1}{4}$ c.; 1 drachm of carb. soda, at 2c. per pound, say  $\frac{1}{4}$ c.; 5 ounces of glycerin at 20c. per pound, say 8c., making a total of  $8\frac{1}{4}$ c. for the lot; and how much do you

pay the manufacturer when buying them? Scarcely less than 80c. per dozen. Note the difference.

In conclusion let me say, manufacture your own goods; do not depend too much upon the manufacturer. Be courteous to them, but be independent.

### The Tests for Eucalyptus Oil.\*

By D. B. DOTT, F.I.C., F.R.S.E.

Of the physical tests density naturally claims attention in the first place. Speaking generally, the oils of low specific gravity are most deficient in eucalyptol, and are more apt to contain phellandrene and, perhaps, other objectionable constituents. At the same time it would never do to place the specific gravity at too low a figure. Helbing and Passmore suggest 0.910 to 0.980. I should say 0.900 to 0.980. There are some good samples, as sample A in table of specific gravity under 0.910 to 0.980 appears a little extreme on the other side, as it is a rare thing to get an oil of specific gravity above 0.920. Yet there is evidently one variety of about 0.927 sp. gr., so that it is probably desirable to retain the higher limit of 0.980. Experience seems to show that there is not much to be learned by the use of the polariscope in the examination of eucalyptus oil. I do not think that this is an instance in which that useful instrument is of much assistance. If an accurate and ready means were known for the determination of the eucalyptol it would be matter for much satisfaction, as that is manifestly the most important point to be determined. As it is, we have to content ourselves with an approximate method.

The boiling point of eucalyptol being 174.5 C. (or very near it), and the terpenes present in the oil having lower and higher boiling points, an approximate determination may be made by rectification. By repeated rectification of a considerable quantity of the oil, a fairly accurate result may no doubt be obtained in this way, but such a process would not be suitable as a pharmacopoeial test. On distilling, say, 100 Cc. in an ordinary distillation flask, the result differs very sensibly according to the rapidity of the distillation.

Neither is the eucalyptol all contained in one fraction, nor does the fraction of ten degrees or even of five degrees above and below 174.5° consist wholly of eucalyptol. For all that, it is the best test practically available. Probably the best fraction to take as representing eucalyptol is that distilling between 170°-180° C.

This has been shown to yield abundance of crystallized eucalyptol when cooled to a low temperature. Messrs. Davies and Pearmain showed that the fraction 180°-190° did not yield crystals when similarly cooled; there therefore appears no reason for the suggestion of Helbing and Passmore that the fraction 170°-190° should be taken as representing eucalyptol. Indeed I decidedly object to this proposal as tending to form a misleading judgment on the relative merits of different oils. A reference to the subjoined table as also to those given in the papers above referred to, will show that by taking the fraction 170°-190° an oil may be made to appear as of much higher relative value than by taking the proper fraction 170°-180°. Further I do not think that the suggestion to introduce the freezing-out test is at all practicable. It is extremely difficult in ordinary weather to get the temperature low

enough to cause any crystallization of eucalyptol, and equally difficult to determine the exact amount which has so crystallized.

As to the proportion distilling at 170°-180°, which a good oil should yield, I do not think we would be justified in fixing the minimum at more than 50 per cent.

After what has been demonstrated by Messrs. Davies and Pearmain as to the solubility of salicylic acid in mixtures of eucalyptol and terpenes it seems scarcely worth while to retain the solvent power of the oil on salicylic acid as a test. Miscibility with alcohol is a simpler and equally valuable test. I have tried some experiments in determining the bromine absorption of different oils, but not sufficient to be able to recommend it as a general test. Broadly speaking, the best oils have least absorptive power for bromine. Iodine absorption is not a convenient process. The nitrous acid and bisulphite tests for phellandren and aldehydes are no doubt of much importance, although I have not found any samples which I have examined in recent times to give distinct reactions with either reagent. Of a large number of samples which I have examined during the past five years, I give the results of the following six:

	A	B	C	D	E	F
Sp. Gr.	.9087	.9115	.9144	.9180	.9183	.9177
100 Cc. of each distilled.						
Below 170°	18.8	33.0	5.0	25.5	17.3	18.6
170° - 180°	58.0	57.3	68.0	64.3	59.3	56.9
180° - 190°	11.6	5.2	12.6	6.6	13.4	13.9
Above 190°	11.1	4.4	13.3	3.5	9.3	10.5
	99.5	99.8	99.9	99.9	99.5	99.9

### Melting Point of Cocaine Salts.\*

By JOHN M. FRANCIS.

In a previous number of the *Bulletin of Pharmacy* I stated that the lack of agreement in the melting-points of certain of the alkaloids, as demonstrated by the experience of others and by my own experience, had led me to doubt the advisability of ascribing to them a *melting point* in the strictest acceptance of the term. As evidence of this I have selected the muriate of cocaine as the basis for four series of experiments.

A reference to the various authorities on pharmaceutical subjects proves that we have a latitude of over 20° C. in which to locate our melting point of any sample of this salt, it being variously placed at from 180° C to 202° C.

This in itself is sufficient to arouse suspicion; how are we to explain it? Are we to suppose that the experimenters have been working with impure preparations, or that they do not determine the melting point properly, or that the lack of uniformity is produced by different manipulation?

As stated in my previous article, I believe that all these degrees of melting may be obtained from the same sample of cocaine muriate by merely varying the degree of heat applied, or the length of time in which the alkaloid is subjected to its action. I have never been able by any means of purification to obtain a sample of this salt which had a melting point as high as 200° C. under any circumstances, but I think it possible that a cocaine muriate might be obtained so free from any trace of impurity that by proper manipulation it would not melt below 200° C.

In the two following series of experiments two different samples of cocaine muriate, called "A" and "B" respect-

\* Abstract of a paper read before the Edinburgh branch of the British Pharmaceutical Society.

\* From the *Bulletin of Pharmacy*.

ively, were used. Six separate portions of the same sample were used in each series, and of these portions No 1 in both series was desiccated over strong sulphuric acid for forty-eight hours; Nos. 2, 3, 4, 5 and 6, in the order named, were desiccated in an air bath at a constant temperature of 108° C. for periods of one, two, three, four, and five hours respectively.

After drying, the sample was cooled in a desiccator, transferred to the apparatus, and the melting point determined as usual. With the exception of the preliminary drying, the conditions in all instances were made as nearly identical as possible.

A.		Melting Point.
No.		
1.....		178° C.
2.....		175° C.
3.....		188° C.
4.....		168° C.
5.....		166° C.
6.....		168° C.

B.		Melting Point.
No.		
1.....		162° C.
2.....		174° C.
3.....		186° C.
4.....		174° C.
5.....		167° C.
6.....		162° C.

It would seem from the above experiments that the salts contained a small amount of the original solvent, which required a desiccation of more than one hour to remove, and that after this had disappeared the effects of incipient decomposition begin to manifest themselves.

In the following two series of experiments, two different samples, called "C" and "D," were used. The conditions under which the melting points were determined were as nearly identical as possible in all instances, except that the time during which the temperature of the apparatus was raised from 22° C. to the melting point of the sample was increased in each succeeding experiment:

C.		Time:	Melting
No.		Minutes.	Point.
1.....		22	191° C.
2.....		28	184° C.
3.....		38	182° C.
4.....		37	180° C.
5.....		47	178° C.
6.....		53	177° C.
7.....		60	176° C.

D.		Time:	Melting
No.		Minutes.	Point.
1.....		15	192° C.
2.....		28	184° C.
3.....		34	182° C.
4.....		37	178° C.
5.....		40	176° C.
6.....		48	174° C.
7.....		53	171° C.
8.....		60	169° C.

It would seem to the writer that the obvious conclusion to be drawn from the above results is, that cocaine muriate is easily decomposable by heat, and that this decomposition sets in before the melting temperature is reached, and that therefore this salt does not have a melting point, but rather a decomposition point, which varies greatly according to conditions.

The pertinence of the above is made evident by reference to the U. S. Pharmacopoeia (1890), in which the melting point of cocaine muriate is placed at 193° C.—a stipulation which if enforced would lead to great confusion because of the variety of results obtained by different persons

whose methods or manipulation might differ only in slight degree.

Furthermore, is it not feasible to explain the lack of certainty (concerning the melting point) of many of the other alkaloidal salts by the same theory?

The experiments cited above are somewhat expansive both as to time and as to the degree of heat applied in some instances, but they serve to show more vividly the possible effects of both as causes of variation. In these experiments I have employed a "Schultze-Anschutz" apparatus which has always proved very satisfactory.

Pharmaceutical Laboratory, Parke, Davis & Co.,  
Detroit, November, 1893.

## Causes of Collapse in Fountains.\*

BY THOMAS WARWICK.

Before proceeding to consider the different ways in which portable fountains are apt to give trouble, it will first be necessary to consider the manner in which these fountains are constructed. Nothing can be simpler. Externally there is a metal shell, made either of copper, iron or steel, designed to give the fountain the necessary strength for resisting the high internal pressures to which it is subjected. But as it is necessary that the soda water do not come into contact with the metal, a lining of some sort is required. Tin is generally preferred for this purpose, and the inside of the shell is either washed with tin or a complete inner jacket or lining of sheet-block tin is used. The latter is far preferable, as tin-wash never affords thorough protection and soon wears off.

Unfortunately the sheet tin lining is subject to one great evil. If the pressure on the outside of the lining ever becomes greater than that inside, the lining will collapse or be forced in, and after a few such collapsings the lining will spring a leak. Innumerable attempts have been made to prevent linings from collapsing. Some manufacturers have tried strengthening the linings or supporting them by stays or other devices so as to prevent their caving in, others on the contrary tried to invent devices which would automatically keep the pressure inside of the lining always equal to that outside; while one inventor more bold than his fellows imagined that if he could only make the lining thin enough and elastic enough, so that it would not be injured by repeated collapsing, he would have solved the problem. But although many and very ingenious devices have been tried from time to time, and although it seems probable that the invention of a fountain with non-collapsible lining is merely a matter of time, at the present day the problem is practically unsolved, and those linings, which, like tin wash, cannot collapse, are more objectionable in other ways.

To the novice the numerous seemingly unaccountable ways in which fountain linings collapse are most perplexing, but a little reasoning will show him the cause. In fact the principal rules for preventing this collapsing may be briefly summarized as follows:

Rule 1. Never close the cock of a fountain until you are ready to let in the carbonic acid gas.

Rule 2. When a fountain is empty the cock should be completely removed so as to avoid all danger of its being closed by mistake. This rule applies equally whether the fountain be kept in the factory or whether it is shipped to a dis-

tance. If the cock be left in an empty fountain, or one that is not under pressure, the chances are nine out of ten that the cock will be accidentally closed, and a fall of temperature will then cause the lining to collapse.

Rule 3. Never pour liquor out of a stationary fountain without first providing some means by which air can enter the fountain as fast as the water escapes. This rule applies specially to the case of washing out the fountains. If the confectioner puts a certain amount of water in his fountain to wash it out, and then turns the fountain upside down to empty it, the lining will collapse, for the water in passing through the bung will fill up the entire space and prevent the outside air from entering. Consequently after a little water has passed out a vacuum will be formed and the lining will collapse. There are several ways of avoiding this danger. One of the most convenient would probably be to have at hand a stout tube longer than the fountain itself, so that whenever it was desired to empty water out of the fountain this tube could be first inserted in such a manner as to reach to the bottom of the fountain, and the fountain could then be overturned without any danger of the linings collapsing, since as fast as water escaped through the bung air would enter the fountain through the tube, thus entirely preventing the formation of a vacuum.

Rule 4. Never agitate a portable fountain until the pressure-gauge shows at least twenty-five pounds pressure to the square inch.

There is another trouble which sometimes, though very rarely, causes the collapse of fountain linings, but in this case the confectioner is powerless to prevent the evil. I refer to the case in which there may be slight pin-holes in the fountain lining. In such a case the fountain is charged, a certain amount of soda water slowly makes its way through this pin-hole and accumulates between the lining and the outer metal shell. Afterward, when the fountain is emptied, this soda water cannot at once find its way back through the small hole, and having no longer any internal pressure to balance it, it expands behind the lining and so forces the latter inward. The only remedy to this state of affairs is to have the lining repaired or a new one put in, but fortunately it is a rare matter for such an accident to occur, and the large majority of cases of collapsed linings are due to negligence.

Leaving now the fountain linings, let us turn our attention to the external shell. This, as before stated, is made either of iron, copper, or steel. Copper has one great advantage; it does not rust. Iron and steel, on the contrary, unless kept well painted, are apt to rust and so become weakened and unfit for use. On the other hand, however, copper has not the tenacity of either iron or steel, and it is quite an expensive metal, consequently to give a copper fountain the same strength as one made of either iron or steel a large amount of metal would be required, making a heavy and most expensive fountain.

Iron, too, has the disadvantage of weight and consequent unwieldiness, hence steel fountains are generally preferred. They require a little more attention to keep them in perfect order, but if freshly painted once a year and tested every Spring they will give much more satisfactory results than either copper or iron fountains.

I cannot insist too strongly upon the necessity of frequently painting the foun-

\*Condensed from the *Confectioners' Journal*.



tains. Many confectioners neglect this important precaution from a mistaken idea that the paint is only put on for ornament. They do not realize that iron or steel, if left exposed to the air, is apt to oxidize or rust, and this rust, to use a popular phrase, gradually eats its way into the iron, thus weakening it considerably. Rust can only take place when air and moisture can reach the iron, consequently portable fountains should be kept in a dry place, and as there is always more or less moisture in the air, the fountains should be kept well painted to prevent the air from coming into contact with the iron. If at any time the paint should by accident be scratched off of a considerable surface of the fountain, the paint brush should at once be passed over this portion. A small scratch is not of much consequence, but it pays to be particular in keeping the fountains thoroughly covered with paint.

### The Pharmaceutical Meetings at Chicago in 1893, with some Notes on American Pharmacy.\*

BY N. H. MARTIN, F.L.S., F.R.M.S.,

President of the British Pharmaceutical Conference, Delegate from the Pharmaceutical Society of Great Britain to the American Pharmaceutical Association and to the Seventh International Pharmaceutical Congress at Chicago.

Before I touch on pharmacy, just a word as to the journey, as to travel in America, American scenery, and, above all, American hospitality. \* \* \* It is genuine, hearty, sincere, and as big as their great continent. I am convinced that it springs from a deeper source than community of interests in the same pursuit, and dates as they would say "way back" in the decades and the centuries whence we have sprung from the same source, and the history as well as the literature, the discoveries and the triumphs of our race are the joint heritage of America with ourselves.

Chicago well maintained the honor and reputation of America in this particular, and those of us who enjoyed the warmth and splendor of her private and public hospitality will ever treasure the reminiscence as one of the bright and happy experiences of our past. Personally, I have only one complaint, and that is that they were a little too exacting in their desires that I should "say something."

At the American Pharmaceutical Association meeting \* \* \* Printed copies of the papers were handed around the room as soon as the authors commenced to read them, and as it was my first experience of this being the case I should like to tell you how it impressed me. It seemed to take all the interest out of the paper for the majority of the audience, who could go on with their private conversations during the reading, and yet by glancing over the printed paper could keep themselves abreast of the main idea in it. The effect was that the reader, instead of having an alert, attentive audience, appeared to be performing some sepulchral rite, but when he ceased the critics were very much on the alert in the discussion.

The American Pharmaceutical Association is carried on in three sections. One is styled the section on Scientific Papers, another the section on Education and Legislation, and the third the section on Commercial Interests.

The section on Scientific Papers was carried on until nearly 11 P.M., and as I was not aware that there would be such

a late sitting I missed a considerable part of it. The papers were varied and practical in their character, and the discussions were participated in by a number of members with considerable spirit.

There were several very interesting papers presented to the section on Education and Legislation but one thing struck me very forcibly, and that was the volubility with which men read papers and discussed views and practices without the least intention or thought that they would have a practical bearing. It all seemed academical and inconsequential, and for such an intensely practical people as we usually think the Americans to be, it seemed to me a waste of time.

Another striking feature was the frequent appointment of "committees of three." The president's address, instead of being made the subject of a vote of thanks immediately after its delivery, as it would be with us, was referred to one of these committees of three. The result was that no piece of business was debated and finished straight away, but there was an endless succession of appointments of committees and receiving of reports. The latter were frequently interpolated between the reading and discussion of some interesting paper, and formed an interruption which was anything but valuable in the elucidation of the particular subject which was at that moment before the meeting. The appointment of these committees was so informal that it sometimes happened that committees were appointed the members of which were entirely unconscious of it until months after. It was no one's special duty to apprise them of their appointment or to summon them to discuss the subject for the purpose for which they were nominated.

The section on Commercial Interests was vastly entertaining, but certainly not profitable. All that can be said is that they met, they discussed, they sometimes passed resolutions, and they adjourned until another year. A considerable degree of heat and temper was manifested during the discussions in this section, but immediately after the adjournment the resources of Chicago provided an efficient antidote, and it was not long, after the evening meeting, before goodwill and friendship again reigned supreme. An attempt is sometimes made to induce this society and the Pharmaceutical Conference of this country to take up what are called "trade matters" (the regulation of prices and so forth). If the men who are so anxious upon this score, and so sanguine that good could be accomplished thereby, could see how little it does in America, I think they would cease their demands.

The dominant feature of the American Pharmaceutical Association was the publication and presentation of the first copy of the United States Pharmacopoeia, which although it is called the Seventh Decennial Revision, and is dated 1890, was not published until August, 1893, and is not to be the official guide until January 1, 1894. You have all seen reviews and notices of this volume, and I have not yet had time to examine it with sufficient minuteness to add to what has been written, so far as the intrinsic merits of the details of the book are concerned, but I think every one who has had an opportunity of even the most cursory examination of it will agree with me that it is a volume of which the Americans may be justly proud. \* \* \* It is evidently a practical book, written by men who have used and tested the formulæ for the various preparations included. At page xxv. of the introductory remarks the general principles to be

followed in revising the Pharmacopoeia are admirable, and I think they may well be taken as a guide in the production of our own standard work.

The second week was devoted to the meeting of the International Congress, and in this arrangement I think our friends on the other side made a mistake. We were almost entirely the same set of men; we had one week pretty fully occupied with matters pharmaceutical; we were largely attracted by the gigantic exhibition on the shores of Lake Michigan, and we were altogether not under the most favorable conditions for the serious discussion of the long list of subjects set down for the consideration of the Congress.

There were some features, however, which were unique to this Congress, and I must not omit to mention them. The first, after settling the preliminaries of business, the election of officers, and so forth, was the presentation of the Hanbury medal to the late Professor Maisch. You all know the professor was too ill to be present, and that the formal presentation was made by our president, and the medal was received by Professor Remington, president of the Congress, on behalf of his dear friend and colleague, Maisch. Gentlemen, I have often been proud of Michael Carteighe, but I never felt more pleased with any man than I was with him in presenting that medal. How his speech has read in hard type I do not know, but, delivered as he gave it, it was inimitable and magnetic in its effect. Professor Remington's reply on behalf of his friend was almost equally felicitous, and was touching in its pathetic allusions. Altogether I rejoice that I had the privilege of being present, and I shall never forget the presentation and reception of the Hanbury medal of 1893.

No meeting of the International Congress would be complete without a reference to an International Pharmacopoeia, but our American friends, with the laurels of their own successful book fresh upon them, took a practical and bold step, and carried matters further than had ever been done before, by voting a sum of one thousand dollars to be placed in the hands of a commission, which was to "be employed by the Congress to compile and publish an International Pharmacopoeia." The resolution of which this formed the basis was referred to a representative committee, of which I happened to be a member, and after a full and most careful discussion it resulted in a permanent committee of three being appointed, to arrange with the Pharmacopoeia Committees of the various countries for the appointment of a commission to compile an International Pharmacopoeia of potent remedies.

This committee, as you will have already seen, is composed of Professor Remington, Mr. Carteighe, and Anton von Waldheim, and as there seems no more valid reason why such potent substances as tincture of aconite, tincture of opium and others should be of different strengths in the various civilized countries, except that there has been no official body to authorize their uniformity, I hope that something like international agreement in these directions may now be accomplished.

The representatives from the continent of Europe who attended the Congress were few in number, but some continental pharmacists wrote and contributed some good papers on Education, Pharmacopoeial Nomenclature, etc., which were duly read and discussed, and the publication of which will be valuable.

\*Abstract of a paper read before the Pharmaceutical Society of Great Britain at an Evening Meeting in London, December 23.

On the third day of the Congress an important discussion took place on the relation of pharmacists to public sanitation, and the subject of the adulteration of food, which was taken part in by several Americans, by Mr. Martindale and Dr. Ramlot. Subsequently a committee was appointed, and the following resolution was unanimously adopted:

"That in the judgment of the Congress, the educated pharmacist is the natural and proper expert on measures for public tests, not only in the prevention of adulterations, but in the inspection of water supplies, of sewage, etc. The pharmacist is, by virtue of his profession, the common chemist of the common people."

The last sentence reads well, and was received with applause, but before the "licentiate in pharmacy" of America, or the "registered chemist" of our own country, will be able to establish any such claim "by virtue of his profession," he must make a much greater effort to become a chemist in reality as well as in name. With regard to the first half of this resolution, so far as it may have any reference to this country, however natural it may be for pharmacists to be the proper experts in the questions of sanitation and adulteration, the duties are already in the hands of persons who are for the most part not connected with pharmacy.

On the broad question of education for pharmacists, the Congress generally approved a four years' apprenticeship, and an enforced curriculum of study, and it was resolved that every delegate should use his influence to bring this about in his own country. An "enforced curriculum!" We have heard of it since education has been talked about; how long is it to remain in the region of talk?

In the mean time there is no useful lesson to be learned from the United States. So far as my observation goes, I must record the impression I have formed that these three all-important parts of pharmacy, education, examination, and legislation, are in an entirely chaotic condition in the United States, and that there are two factors, viz., the dollar and politics, which exert such a pernicious influence, and are so powerful, that I fear it will be many years before pharmacy will reach the plane to which many of our friends in America rightly aspire, and to which some of their literature which we meet with in this country would lead us to suppose they had attained.

With regard to education, if advertisements and prospectuses were reliable guides, every State and almost every city is provided with most ample facilities, but if we look beneath the surface and examine closely into the machinery for education, we shall find it differs in value—from the college of pharmacy with a seventy years' record of honored names and honest work, to the college (*sic*) of just as many months or days, with its self appointed and denominated professors, who have little to commend them as fit for the posts they occupy, except the possession of an ineffable amount of self-assurance, and a fixed determination to be heard and known for their much speaking. There would appear to be no uniform standard of educational attainment even aimed at by many of these bodies, and although several of them have what they are pleased to call junior and senior courses, we find in some cases the latter are a mere repetition of the former, and that no attempt is made to take the student on to any higher plane of education. Most of the colleges, as the compliment of an attendance upon their prescribed course and a more or less serious examination, confer upon their students the title of "graduate

in pharmacy," but so little is this title respected in America, and so slight is the confidence reposed in its meaning anything, that at the meeting of the American Pharmaceutical Association in Chicago the following report was unanimously adopted in the section on Legislation:

"Regarding the question of registering graduates of pharmacy without examination by boards of pharmacy, it is the sense of this section that the best interests of pharmacy are secured by the non-recognition of diplomas by the State boards. That there shall be no difference in the treatment of applicants for registration as pharmacists, whether they be graduates or not."

This means that the title of "graduate of pharmacy" is worth so little, forsooth, or is of such variable and uncertain worth, that even the boards of pharmacy (and I shall tell you presently how they are constituted and how they examine) are advised by a national assembly of pharmacists not to accept the diploma in lieu of their own examinations. I quote the following from a report of a State board of pharmacy:

"It is to be regretted that some colleges of pharmacy, in anxiety to increase their popularity or to enrich themselves financially, have become somewhat lax in their requirements for graduation," and then follow some further remarks, and a copy of a correspondence with a conference of the teaching colleges of pharmacy of the United States, in which are pointed out specific instances of laxity, such as crude and raw students with as little as fifteen months' practical experience of the drug business, and being under age, having been granted diplomas. The Dean (*sic*) of one college claimed that "every American college is doing the same thing." The pharmaceutical journals admitted the existence of the evil, although some of them "hedged," but it was mentioned as a significant fact that these journals were the organs of the colleges complained of. In this connection it will be interesting to record a question and answer in one of the papers presented to the American Pharmaceutical Association. "How can colleges of pharmacy be placed upon a purely educational basis instead of being conducted for the money they can make?" "By the drug trade of each section giving annually one-fourth the sum now expended for association, entertainment and commercial interests to the establishing of an endowment fund for the nearest college of pharmacy, the income to be devoted to practical instruction."

It will be impossible, within any reasonable space, to present to you a synopsis of the teaching in all the colleges of pharmacy in the States, but, broadly, the opinion I have formed is that there is not anything like sufficient time devoted to laboratory practice in any of the subjects taught. Lectures and review quizzes are provided in abundance, and these are frequently given in the evenings. I have before me the time table of one college in which there are lectures from 7.30 to 8.30 P.M., from 8.45 to 9.45 P.M., and a review "quiz" from 10 to 10.45 P.M., every night in the week except Saturdays, when there are two lectures and a review a little earlier. It almost takes one's breath away, and one naturally asks—When do the young men have time to think, and to assimilate and digest the substance of so many lectures and "quizzes," in such doses at bedtime.

These lectures, and much of the work in many of the colleges, are arranged for the accommodation of men who are expected to be holding situations in some store or pharmacy and who are spending the balance of their time (the best of their time I should say) in the occupation of the proprietors of drug stores, where a miscellaneous business of all kinds is carried on, and whatever legitimate pharmaceutical work there is merely an adjunct to the soda fountain. One college even advertises the fact that students attending it can obtain situations easily and earn enough for board and lodging.

With regard to practical work, we find that one of the colleges—which boasts that "the facilities for laboratory instruction are unexcelled in this or any other country," and has a botanical lab-

oratory, a microscopical laboratory, a chemical laboratory, a pharmaceutical laboratory, and a dispensing laboratory—condenses its practical work into two hours twice a week for twenty-five weeks, during which the students are supposed to be so proficient in these various studies that time is found for lectures on "anatomy, physiology, and the application of medicine to diseases, and the application of trusses to hernia." Among "elective subjects" we find lectures on the "origin and location of mankind, the origin of trade, botanical gardens, and medical practice," but in order to induce the student to "elect" to follow these he is assured that "the subject is very interesting, and takes up to lecture hours."

I now come to the question of the examinations by which pharmacy is State-controlled in America, and as the result of which the examined man becomes the possessor of a "certificate of qualification and competency," to either become an assistant, or the possessor of a store on his own account. In almost every State of the Union (if not in all) there is now in existence a pharmacy act, by which there is created a "board of pharmacy," among the duties of which is the conduct of the State examinations. These boards of pharmacy usually consist of five men (in some cases there are only three), who are appointed by the governor of the State for a term of years, and whose duties are only loosely defined, while their powers are as plenary and as absolute as the most despotic monarch could desire. In some States no other qualification is necessary than that the persons are, in the opinion of the governor, competent to perform the duties; whereas, in other States, it is provided that three out of the five shall be graduates in pharmacy. These boards of pharmacy appoint one of their number as president, and another as secretary, after which they make up various committees. In one board of five members there exists a committee on "complaints and grievances," another on "adulterations and poisons," a third on "auditing and finance," and so on, so that it is no fancy picture that in America the ideal committee of "one" must be frequently reached.

I have not desired to look for motives in the selection and appointment of the members of these State boards, but when I tell you that the secretary is appointed for a term of years, that in one State he gets a salary of \$2,000 and an allowance of \$600 or \$700 more per annum for expenses, I think there is room for the suspicion that political services rendered may be at least as powerful as pharmaceutical fitness, in the selection and appointment of one member of the board.

The board does not meet, as we would suppose, in the capital town or the most important center of the State, but is peripatetic, and travels (as occasion may require, I suppose) from one center to another; the consequence is there are no specially fitted rooms or laboratories suitable for the conduct of the practical subjects of dispensing and analysis, so we find these are dispensed with and the examinations are entirely theoretical and almost entirely written ones. With regard to materia medica no further provision is made than that specimens of drugs, such as one member of the board can obtain by a visit to the chemists' shops in the neighborhood, just before the examination, appear to be handed to the students for identification and written description.

The members of the board on reaching a town take up their quarters and hold

their meeting at some hotel, while the examination may be held in a room in another hotel. On reaching the hotel where the examination is to be held the secretary calls the roll of students in attendance, and the president proceeds to make a speech, in which he informs the candidates, for the first time, so far as I can make out (there appear to be no printed rules or regulations to guide either the board or the students), of the subjects and scope of the examination, and warns them against the "clandestine use of books," "whispered consultations," and other unfair means of attaining the coveted registration of the board.

In one case which I have recorded, thirty-one candidates answered to the roll call, and then two members of the board examined the candidates in "toxicology, prescriptions, and materia medica," from 2 to 5 P.M. A recess was then called, and at 7 the class re-assembled and was examined in chemistry by another member of the board until 9.30 P.M. The next morning at 9 A.M. the candidates re-assembled, and were examined in pharmacy until 11.15 by a fourth member of the board. This completed the examination so far as the class was concerned, and a recess was taken by the board until 8 P.M., when the full board met again to "consider the answers to the questions," and as the result fifteen candidates were found to have passed a satisfactory examination before the board of pharmacy, and "on motion, were declared licentiates in pharmacy of the State of ———." How long this process of examining the papers of thirty-one candidates in five subjects took is not on the minutes, but as a good deal of other work, including administrative and financial business, was done, and no "recess" was called, I infer that the decision upon the papers must have been reached with considerable dispatch.

On another occasion, and in another town, the same board met when only three members were present, two of whom (so the minutes record) repaired to the ——— hotel, where seventeen candidates were in waiting. The examination was conducted during the afternoon of one day and part of the morning of the next, and as the result four names were added to the list of "licentiates" of that particular State. You will observe the rejections—over 75 per cent.—are very heavy at this examination, and we may infer from it probably, that the two members of the board, conscious of their responsibility to examine in five subjects, erred if at all, on the side of the "safety of the public."

By this board toxicology is one of the subjects included in the examination, and I find them among the questions a request for the symptoms of poisoning by aconite and nitrate of silver, subjects which we should relegate to the medical man. In another examination I find "physiology" included among the subjects, and such a question set as "Name the largest gland in the human body, and give an account of its functions."

It is not necessary for me to add specimens of ridiculous answers to questions, a number of which were included in papers presented to the American Pharmaceutical Association, or to remark that some of the candidates are so ignorant and so little accustomed to handle drugs and medicines that a writer of a paper presented to the association mentions "the possibility of a candidate for registration in pharmacy being poisoned by the examination of samples submitted," but I would ask our American *confrères*, in all seriousness, if examination by a State-governor

pointed board of pharmacy, in the manner and under the conditions I have sketched, can be accepted as anything better than a parody upon pharmaceutical education and knowledge.

It is no answer to say that in this State or in that the governor has made the wisest possible selection, and has appointed five absolutely wise, learned and conscientious pharmacists, who are capable men, able and willing to devote the time to the work; the system is entirely wrong, and no examination, in the true sense, can be conducted with uniformity and a becoming dignity by three or five men touring from one town to another, without a fixed suite of rooms properly equipped with apparatus and specimens for the work.

Lastly, I come to legislation, and on this point I have not much to say. One of their own writers states "that the laws we have are crude, inconsistent, and therefore without value." I might leave this section of my notes there, but it will perhaps be more interesting to give you a slight sketch of what their laws are like, and I take a copy of the pharmacy law of one of the States, which was passed in 1889. This act consists of eleven sections. By the first it was enacted that "No person shall conduct or keep a shop of any kind for retailing drugs and medicines, or for dispensing physicians' prescriptions, except he be registered." So far this seems an ideal Pharmacy Act, and the handling for every purpose of drugs and medicines is confined to the educated and examined pharmacist, but unfortunately the second half of the section gives it nearly all away, as it is expressly stated that "it shall be lawful for any person to sell proprietary medicines, or to be the owner of a shop, if he takes no part in conducting or keeping the same." This last condition is evidently overcome sometimes, as we find an advertisement for "a qualified man to take charge of a shop at a distance, or of one who has a diploma to let."

By the second section a commission of three, to be styled the "Commission of Pharmacy and Practical Chemistry," is to be appointed by the governor, and to hold office for three years.

Third.—The commission shall hold meetings for examination, etc., at least quarterly, "at such time and place as they may see fit."

Fourth.—They shall examine candidates, and if any one is found skilled and learned in pharmacy they shall give him a "certificate stating that he is a skilled pharmacist and authorized to engage in the business of apothecary and druggist."

You will have observed how, under such delightfully vague law as this, men are examined in toxicology, physiology, and many other subjects which we do not connect with pharmacy. There is really nothing to prevent the board from requiring a knowledge of astrology and palmistry if this State-governor appointed board of three thinks these subjects essential to a candidate who is to be called "learned in pharmacy."

Fifth.—They shall examine applicants over 18 with two years' experience, and register them as assistants.

Sixth.—A registry to be kept.

Seventh.—A record of the doings of the Commission is to be filed with the Secretary of State.

Eighth.—"Applicants for pharmacists" (the fourth clause provides for their being registered as "apothecaries and druggists") certificates are to pay five dollars, and of assistants' two dollars, and each commissioner is to receive five dollars a day for each day of actual service not exceeding fifteen days in the year, and all expenses incurred in the discharge of his duties."

This is evidently a very economical State, and unless there is a good deal of elasticity about the last words of the clause, the State must be blessed with some patriotic men, who will travel a

long distance and examine men at two dollars and five dollars a head on the pitance of five dollars a day and expenses.

Nine.—"All pharmacist's lawfully registered are authorized to keep spirituous liquors for compounding their medicines."

In one form or another this is a very important clause. We find in one State one of the reasons for a candidate presenting himself as a candidate for examination is that he may as a registered pharmacist procure a "druggist's license to sell liquors," at the nominal fee of a dollar.

Ten.—"All persons violating this law shall be punished by a fine not exceeding fifty dollars for each week of the said violation."

Prosecutions appear to be among the duties of the commission, and quite a number of convictions are obtained and penalties recovered.

Eleven.—"This Act shall not apply to physicians."

In most States men who possess medical degrees can claim to be registered as pharmacists without examination and many practice as medical men at the same time they keep open shop.

Before I finish you may ask me—But what is the actual condition of the drug trade, wholesale and retail, in the States? With regard to the wholesale and manufacturing trade I will say but little, except to record the impression that there is a great disposition to use the power of money and the services and influence of science and scientific men, in fair and unfair attempts to induce medical men to prescribe and use only X. Y. and Co.'s tincture or extract. The result is that a dispensing chemist has to keep perhaps half a dozen different makers' preparations of a pharmacopoeial article. As to the retail trade, so large a proportion of their pharmacies have the appearance of bazaars and refreshment saloons that one is forced to the conclusion that these pharmaceutical adjuncts are really the important sources of the incomes of the proprietors, and we cannot but suppose that pharmacy suffers accordingly. It was with a feeling of intense pleasure that I visited on my last day in New York a retail pharmacy where there was no sign of soda fountain or sundries, and a pure prescription and drug business was done. I think it is due to the proprietor of this pharmacy who has the courage to conduct a pure drug business, to state his name. It is Mr. Fraser, of Fifth avenue, and that I should like to take this opportunity of thanking him, as well as many others whom I met in America, for much courtesy in giving me information.

In conclusion, although in what I have written I may appear to have blamed more than I have praised, I hope it will be received

"In spite of all, as brother judging brother."

There are men who have been, and are, connected with pharmacy in America whom I respect as highly as I do some of our own most distinguished pharmacists. Proctor, Parrish, Bedford, Markoe, Maisch, Squibb, Remington, and a number of others, have been familiar to me in their writings ever since my own connection with pharmacy, and I am indebted to them for much of the information which I possess and value. Bedford, Squibb, and Remington I count it a happiness to have known, and to know personally. It is with the sincere desire that the pharmacists of the great American nation may be worthy of such men that I have written candidly upon what I have observed which is hindering, and will hinder, the progress of pharmacy in that country.

## Assay of Alkaloidal Drugs.\*

By C. C. KITTER.

## NUX VOMICA.

Fifteen grammes of the dried and finely powdered seeds are placed in a small extraction tube 12 cm. long 25 mm. wide, terminating in a delivery tube 7 mm. wide and 5-6 cm. long, the end of which is ground obliquely; the upper end of the extraction tube is ground so that it can be covered with a small glass plate, uniformly packed and percolated with ether (this is facilitated by connecting the apparatus with an ear pump until the ether reaches the small plug of cotton), allowing the percolate to drop into a vial of 150 grammes capacity until 10 drops of the percolate leave no residue upon evaporation, which requires about 100 Cc. ether and from 80 to 90 minutes according to the fineness of the powder.

To determine the amount of alkaloid extracted in this treatment by the solubility of the alkaloidal salt in the fixed oil solution the ethereal solution was agitated with an excess of  $\frac{1}{10}$  hydrochloric acid, the greater part of the ether decanted and the residual liquid titrated with  $\frac{1}{10}$  ammonia, using iodococin as indicator (*Am. Journ. Pharm.*, 1892, 521). The rather remarkable observation was made in this connection that using the unpeeled nux vomica about 24 per cent. of the total alkaloid was found in the yellow ethereal solution against only 7 per cent. in the case of peeled nux vomica yielding a colorless filtrate; the fat averaging 8.15 per cent.

The extraction tube is next placed on a dry, tared vial of 250 grammes capacity, the cotton plug pushed into the vial and the drug washed in with ether, adding of the latter to make up to 100 grammes; after adding 50 grammes chloroform, and thoroughly agitating, 10 Cc. ammonia water (10 per cent.) are added and the mixture shaken repeatedly during half an hour. In the mean time the ethereal fat solution is agitated with 5 Cc.  $\frac{1}{10}$  hydrochloric acid and 10 Cc. water, pouring off the ether as far as practicable and securing a complete separation by the use of a separating funnel, which is then washed with several portions of water so that the acid solution and washings measure 25 Cc. This acid liquid is added to the mixture in the vial, shaking for several minutes and after the separation into two layers 100 grammes of the ether-chloroform solution are poured (if necessary through a small filter moistened with the solvent) into a tared Erlenmeyer flask and the solvent distilled off.

The alkaloids remain as a colorless varnish, which is freed with difficulty from the chloroform by heat, but which can be easily effected by covering the alkaloids several times with small quantities of alcohol, which is then boiled away in a water-bath; the alkaloids during these operations become crystalline and can be dried to constant weight at a temperature not exceeding 95-100° C.

The alkaloids can then be titrated by dissolving in 5 Cc. chloroform with the aid of a little heat, adding 40 Cc. ether 10 Cc. water, one drop of an alcoholic iodococin solution (one per cent.) and 10 Cc.  $\frac{1}{10}$  hydrochloric acid; after agitation the excess of acid is titrated with  $\frac{1}{10}$  ammonia until a permanent red color appears in the aqueous solution; after each addition of ammonia the flask must be corked and agitated; 1 Cc.  $\frac{1}{10}$  acid is taken as

the equivalent of 0.0364 grammes alkaloid. The following table exhibits the results:

	ALKALOIDS.		
	By Weigh- ing. Per cent.	By Titrat- ing. Per cent.	Difference. Per cent.
(1) Unpeeled.....	2.640	2.548	0.092 = 3.50
(2) Unpeeled.....	2.685	2.611	0.073 = 2.01
(3) Peeled.....	2.855	2.795	0.060 = 2.10
(4) Peeled.....	2.780	2.785	0.055 = 2.18

The difference between weighing and titrating is so slight that the former suffices for practical pharmaceutical purposes and enables the assay to be completed in less than three hours. It is important to adhere to the use of two parts ether and one part chloroform in the extraction since a larger proportion of chloroform increases the yield of crude alkaloids (probably caused by solution of the glucoside loganin; the red color obtained by warming the crude alkaloid with dilute sulphuric acid indicates this), and hence a greater difference is shown between the weighed and titrated alkaloids. The use of a greater proportion of ether risks loss of alkaloids by crystallization since the alkaloids are almost insoluble in pure ether. The fear that the peeled nux vomica contains a considerably higher percentage of alkaloids than the unpeeled appears groundless from the results of the analyses quoted; for pharmaceutical purposes the peeled nux vomica is preferable because of its advantages in making tincture and extract.

## STRYCHNOS BARK.

Strychnos bark is assayed as the seeds with the difference that the bark is first percolated with a mixture of ether and chloroform; these solvents extract only traces of alkaloid, but leave a dark greenish brown residue of chlorophyll, fat, wax, etc., amounting to 0.98 per cent. of the bark. The yield of alkaloids is higher than in the seeds, three determinations giving 4.55-4.56 per cent.; the alkaloids were obtained as a yellowish varnish, which required treatment with four portions of alcohol before a crystalline appearance was noted; the residue was obtained of constant weight after considerable difficulty due to the preponderance of brucine; by a method to be described there was found, in the alkaloidal residue, strychnine 88.6 per cent., brucine 66.4 per cent.

## DRY ALCOHOLIC EXTRACT OF NUX VOMICA.

This was assayed by placing 1.5 grammes of the dry, finely powdered extract in a vial of 150 grammes capacity containing 10 grammes of water, agitating until a uniform mixture is obtained, adding 30 grammes chloroform and 60 grammes ether, and, after agitating, 5 Cc. ammonia water (10 per cent.) The mixture is agitated for several minutes, and the vial set aside; after 15-30 minutes the mixture will separate so that 60 grammes of the chloroform ether solution can be transferred to an Erlenmeyer flask, filtering if necessary, and the assay finished as already described. An extract made by the author from the unpeeled seeds (which had previously been extracted with ether) and 70 per cent. alcohol yielded 12 per cent. extract containing 21.2 per cent. alkaloids; two commercial extracts yielded 14.3 and 16.2 per cent. alkaloids.

## QUANTITATIVE SEPARATION OF STRYCHNINE AND BRUCINE.

This is effected by a modification of Gerock's method, and is dependent

upon the alteration of brucine sulphate by dilute nitric acid into compounds having no basic character, while strychnine sulphate suffers very little or no decomposition under the same circumstances. 0.2-0.4 grammes of the purified alkaloids (the crude alkaloids are dissolved in dilute sulphuric or hydrochloric acid with the aid of heat, the solution filtered and extracted with a mixture of 3 parts chloroform and 2 parts ether after adding ammonia in excess: the chloroform ether solution leaves the alkaloids colorless and perfectly soluble in dilute acids; any loss occasioned in the purification is of no moment, since it is desired to establish only the relative quantity of the two alkaloids) are dissolved in an Erlenmeyer flask in 10 Cc. dilute sulphuric acid (10 per cent.), applying heat cautiously so that as little evaporation as possible takes place. After cooling one Cc. concentrated nitric acid, sp. gr. 1.41-1.42, is mixed with the solution (very frequently the sulphuric acid solution upon cooling deposits crystals of strychnine sulphate, which dissolve again on the addition of the nitric acid), producing the well-known red coloration of brucine with nitric acid. The flask is set aside for one or one and a half hours at the ordinary temperature, adding at the expiration of the time 40 grammes chloroform and 40 grammes ether and, after agitation, 10 Cc. ammonia water (10 per cent.) The mixture is shaken for several minutes and 40 grammes of the chloroform-ether solution filtered into a tared flask, the solvent distilled off and the residue (strychnine) dried at 95-100° C. and weighed.

The crystallization of the strychnine is so sudden that the crystals are thrown around in the flask with considerable violence; to obviate this the distillation should be discontinued as soon as crystallization commences and the remainder of the solvent gotten rid of by an air current, which also facilitates the final drying. The strychnine is generally of a yellowish color due to traces of adhering coloring matter; it must always be tested for brucine by solution in concentrated sulphuric acid and addition of a small crystal of potassium nitrate, only a pale yellow color being allowable. This method is also satisfactory in testing commercial brucine for strychnine. Six determinations of the strychnine in the alkaloids from nux vomica gave results varying from 45.1-50.6 per cent., and averaging 47.16 per cent., confirming the statement of Beckurts that the two alkaloids are present in about equal parts.

## CINCHONA BARK ASSAYS.

These are made by a very much simplified Haubensack-Kuersteiner method (*Am. Journ. Pharm.*, 1891, 847; 1893, 71). 12 grammes of the dried and finely powdered bark are placed in a vial of 250 grammes capacity, 120 grammes ether, and after agitation 10 Cc. ammonia (10 per cent.) added, and the mixture repeatedly shaken during half an hour; if the bark to be assayed is succirubra 10 Cc., if calisaya 15 Cc. water are added and the mixture agitated for one minute; 100 grammes of the ethereal solution (which from succirubra is perfectly clear, from calisaya, however, is somewhat turbid) briskly agitated in a flask with 3 Cc. dilute sulphuric acid and 37 Cc. water, and allowed to stand for about ten minutes, when a perfect separation will allow of the decanting of the greater portion of the ethereal layer, the remainder is transferred along with the acid solution to a small separator and the acid solution allowed to run off into a beaker and the flask and separator rinsed

\*Abstract from the jubilee pamphlet of the Swiss Apothecaries' Association. *American Journal of Pharmacy*.



with 10 Cc. water, the acid solution is freed from ether by warming and replaced in the cleaned separator, where it is agitated with a mixture of 80 grammes chloroform and 10 grammes ether along with 5 Cc. ammonia water. The chloroform-ether solution is run into a flask and the agitation repeated with 15 grammes chloroform and 5 grammes ether; the united alkaloidal solutions are filtered through a small chloroform-wetted filter into a tared flask and the solvents distilled off.

The alkaloids from calisaya are generally crystalline, from succirubra amorphous and retaining chloroform; by the addition of 3 to 5 Cc. absolute alcohol and boiling this away in a water-bath the alkaloids are obtained crystalline and capable of being easily dried at 100° C.; a higher temperature is to be avoided.

The weighed alkaloids may be titrated by dissolving in 10 to 15 grammes alcohol, adding water until precipitation commences, and titrating with  $\frac{N}{10}$  hydrochloric acid. The weighed alkaloids may be titrated by dissolving in 10 to 15 grammes of alcohol, adding water until precipitation commences, and titrating with  $\frac{N}{10}$  hydrochloric acid, using hæmatoxylin as indicator (1 gm. hæmatoxylin dissolved 100 gm. diluted alcohol with 2 to 3 drops of ammonia). From the results of a large number of assays 1 Cc.  $\frac{N}{10}$  hydrochloric acid is the equivalent of 0.0815 gm. calisaya alkaloids and of 0.0804 gm. succirubra alkaloids.

*Fluid extract of cinchona* is assayed by diluting 6 gm. fluid extract with 15 gm. water, adding 90 gm. ether and 5 gm. ammonia water and agitating repeatedly during one-half hour; from 75 gm. of the clear ethereal solution, representing 5 gm. of the fluid extract, the ether is distilled off and the alkaloids weighed at 95 to 100° C. The alkaloids must be titrated by dissolving in 10 gm. alcohol, adding 40 gm. water, two drops hæmatoxylin solution and sufficient  $\frac{N}{10}$  hydrochloric acid to produce a permanent yellow coloration.

In assaying *extract of cinchona* 1.5 gm. are triturated with 15 gm. water, transferred to a vial of 150 Cc. capacity, 90 gm. ether and 5 Cc. ammonia water added, thoroughly agitated during one-half hour and 60 gm. of the clear ethereal solution, representing one gramme extract proceeded with as above.

The thalleioquin test can be made with these several titrated solutions by diluting 1 Cc. with 9 Cc. water, adding 2 to 3 drops bromine water, and lastly 1 Cc. ammonia water.

## Notes on the Chemical and Microscopical Examination of Urine and Sputum.\*

E. J. MILLARD, F.C.S.

### URINE.

**Color.**—Light yellow urine may be due to drinking excess of water or to nervous affections. Diabetic urine is usually light colored. Reddish-yellow color may be due to santolin or chrysophanic acid and can be detected by alkalis turning it red. Urine of fevers is nearly always highly colored, concentrated and clear. In jaundice the urine is brown, or tinged with green from bile. Smoky-brown color to almost black may be from blood, in which case the deposit will contain corpuscles. Carbolic acid or creasote internally turn the urine dark, and senna renders it brown.

**Reaction.**—The acidity is due to acid

sodium phosphate. After a full meal the urine is often alkaline, and this is called the "alkaline tide," while the "acid tide" occurs after a fast. In acute rheumatism and fevers the urine is highly acid.

**Albuminuria.**—After excessive exertion or exposure the urine may contain traces of albumin. In Bright's disease the amount present rarely exceeds 1 per cent., and Esbach's albuminometer is only graduated to 0.7 per cent. The author mentioned that he had recently examined a sample which contained 2.4 per cent. of albumin. Only two ounces of urine had been passed and it was simply loaded with albumin and casts. The separation of albumin and globulin, which occur together in albuminuria, may be effected by estimating first the total proteids in Esbach's albuminometer. Then a portion of urine is saturated with magnesium sulphate, filtered, and the filtrate estimated for albumin. The difference in the two results, after allowing for increase in volume from the magnesium sulphate, represented the amount of serumglobulin precipitated by the sulphate. When blood is present, as in inflammation of the kidneys, the serumglobulin is in excess.

The recently introduced tests for albumin were next described. Trichloroacetic acid was strongly recommended, it being stated that it detects 1 part in 100,000 of urine with ease. Its reaction with alkaloids should be observed. On adding a few drops of trichloroacetic acid test to urine containing quinine, a precipitate is produced which is soluble, either by heat or by large excess of the reagent. Trichloroacetic acid has been shown to detect albumin when it was dissolved by acetic acid and not precipitated by picric acid or by heat. In the milk treatment of Bright's disease no albumin coagulable by heat remains. Nitric acid gives a precipitate, soluble in excess, and saturated salt solution gives a precipitate increased by the addition of acetic acid. This was due to the conversion of albumin into albumose. Spiegler's test is very delicate, and does not precipitate peptone, but behaves with alkaloids in the same manner as trichloroacetic acid. It is prepared by dissolving mercuric chloride, 8 parts; tartaric acid, 4 parts; glycerin 20 parts; in water, 200 parts. The urine is first acidified with acetic acid, and filtered from mucin.

Salicylsulphonic acid had been recommended by Dr. Williams, as it precipitates one part of albumin or globulin in 100,000. Albumoses and peptones are also precipitated, but dissolve on heating. It was pointed out that the heat and acetic acid test, very commonly employed, will give a precipitate when the patient is taking tolu, balsam of Peru, etc. This is due to precipitating the resin, but as it is soluble in alcohol there need be no difficulty in recognizing it.

**Peptonuria.**—If peptones are present it is an unfavorable symptom. The biuret reaction (trace of copper sulphate and excess of potash giving a red color) and precipitate with picric acid, soluble on heating, are also obtained with acid albumin. It is, therefore, necessary to add acetic acid, saturate with ammonium sulphate, filter and test filtrate.

**Glycosuria.**—Fehling's solution is reduced by other bodies besides dextrose. Uric acid accounts for fully one-fourth of the reducing action of non-saccharine urines, while creatinine, hippuric acid, etc., have also a similar action. Internal administration of chloral, camphor, etc., was formerly stated to produce sugar in urine, but it is now known that glycuronic acid is the body present. In diabetic urines there is not much difficulty, as the

quantity of sugar is large, usually over 4 per cent. It is with samples containing only about  $\frac{1}{2}$  per cent. of reducing substance that care must be taken to ascertain if due to dextrose or glycuronic acid. The latter has very little clinical importance. To make sure as to which is present the fermentation test is used for confirmation, as glycuronic acid is not affected.

Mr. A. W. Gerrard's patent "Glycosometer" was exhibited at this point, and an estimation of diabetic urine performed with it. The diluted urine runs from a special burette into the boiling Fehling's solution, and when the color is discharged the level of the urine in the burette represents the percentage of sugar. It was pointed out that although the end reaction was not so sharp as with Pavy's method, the absence of ammoniacal fumes was a considerable advantage.

**Urea.**—The average amount of urea present is 2 per cent., but is increased in fever and diabetes, and decreased in chronic and wasting diseases. Mr. Millard then defended the hypobromite method of estimating urea against the views expressed quite lately in the *Lancet*.

**Uric Acid.**—The high results of Haycraft's method of estimating uric acid are due to the precipitation of compounds of the xanthine group. Uric acid, according to Sir W. Roberts, exists as quadrates, which are decomposed by the phosphates with liberation of uric acid. In gout the excretion of uric acid is diminished owing to its accumulation in the tissues. The appearance of the concretions in joints, as in gout and rheumatism, was next described, and Dr. Haig's experiment on the excretions of uric acid during the administration of salicylate of sodium.

**Hæmatoporphyria** in urine had been stated to be due to the administration of sulphonal, but Dr. Adair had informed the author that at the Wadley Asylum, where the drug was given in 70 grain and 80 grain doses, no case had been observed.

**Urinary Sediments.**—Pus, and its appearance in alkaline and acid urine, was described. The addition of acetic acid renders the nuclei more apparent for microscopical examination. Mucus was distinguished from pus by its behavior with acids, alcohol and alum. To separate the two, precipitate pus with mercuric chloride, filter and add acetic acid, which precipitates mucus.

**Casts** may be granular, hyaline, epithelial, fatty or blood, according to their composition and contents. Cylindroids were also described, and the microscopic appearance of these was given. A useful method for recognizing epithelial debris, casts, etc., was to add a drop or two of solution of methylene blue to the deposit, before examining under the microscope.

### SPUTUM.

The chemical composition of sputum is mucin 2; albumin and fat, 1; extractives, 2; salts; 1; water, 94.

In bronchitis it is yellow and tenacious, in phthisis it may be tinged with blood, in pneumonia it is rusty-brown and in the last stages becomes purulent. Sputum of bronchitis is very watery, while that of pneumonia is ropy.

The detection of yellow elastic tissue in sputum is very important. A small quantity of sputum is boiled with an equal volume of caustic soda solution, containing 20 grains in a fluid ounce. When the liquid is quite fluid it is diluted with water and placed in a conical vessel. After some times the undestroyed tissue

\* Condensed from the *British and Colonial Druggist*.

is taken out with a pipette and examined microscopically. The tissue is nearly always present in acute phthisis, while in the more advanced stages fragments will be present.

For the examination of tubercle-bacilli the expectoration should be collected before breakfast. The opaque, white particles will be found most frequently to contain the bacilli. The method used by Mr. Millard for the detection of tubercle bacilli appears to be a modification of Crookshank's and is as follows: With the aid of a scalpel a particle is placed on a clean cover-glass, and a second cover-glass applied face to face with a slight rubbing pressure, so as to insure a thin even layer on each. Slide the glasses apart and dry by gently warming. Holding the cover-glass film upward it is passed several times quickly through a Bunsen flame to coagulate the proteids. Some carbonic fuchsin is heated in a watch glass, and the cover-glass floated in it, film downward, and allowed to remain at least ten minutes. It is then removed and immersed in diluted sulphuric acid, containing about 20 per cent. of acid. Wash well in water, and if more than a light red color remains, decolorize again in acid and wash with water. Place two or three drops of solution of methylene blue on the film, allow to remain two or three minutes, and wash well with water until no more color is removed. Dry thoroughly by warming, and mount in xylol-balsam.

#### Production of Castor Oil in India.

The United States Consul at Calcutta in a late report says that there are three processes by which castor oil is extracted in the Madras Presidency. (1) The seed is roasted in a pot, pounded in a mortar, and placed in four times its volume of water, which is kept boiling. The mixture is then frequently stirred with a wooden spoon. After a time the pot is removed from the fire and the oil skimmed off. The residue is then allowed to cool, and next day is again boiled and skimmed. The oil thus procured is superior to that first obtained, and is kept separate. (2) The seed is first boiled, and then dried in the sun for two or three days. It is then pounded, and the further process is as in the first method. (3) The seed is soaked for a night in water, and next morning ground in the ordinary native oil mill. The oil is removed by putting the pulp into a piece of cloth and then squeezing the oil into a pot. This oil is used for lamps and dyeing purposes. In Bengal the castor seeds are partially roasted in a pan and pounded in a mortar without being husked. The stuff so prepared is mixed with water and placed in an earthen pot or jar over a fire, the quantity of water used being two or three inches above the level of the crushed seed. As the water evaporates, the oil rises to the surface, and is then poured into another vessel. The jar is then removed from the fire and allowed to cool, after which some cold water is added to the mixture, when the jar is placed in the sun. The oil still remaining in the mixture then appears at the top, and is removed by hand. The oil thus obtained is boiled again in a separate pan, by which process any moisture and all other extraneous matter are eliminated, and the oil becomes purified and fit for consumption in lamps. There is another process for the extraction of oil from castor seeds followed by the people of the Bengal Presidency, which differs but very slightly from that already described. In this method the seeds are boiled

with water before being pounded. When they become soft they are placed in the sun, and when dry are crushed. The following processes are adopted by one of the manufacturers in Calcutta in extracting oil from the castor bean. (1) The seeds are first cleaned with the hand by women. They place a quantity of seed on a smooth board, and with a flat wooden mallet give them one or two strokes, which breaks the seeds into two or three pieces, thus rendering the separation of the husk easy. The broken seeds are then winnowed with a common basket winnower, which removes the husk from the kernel. The kernels are then dried in the sun and afterward broken by a crushing machine. They are then put in small canvas or gunny bags, and pressed in a hand machine, the oil falling into a pan placed underneath. The oil is collected in large galvanized iron vats, and bleached by exposure to the sun, which also causes the sediment to precipitate. It is next boiled, in order to evaporate any remaining moisture; vegetable charcoal is added to it, and the oil is then filtered through flannel or blotting paper. The oil thus obtained is of the purest quality, used only in medicine, and is manufactured to order. No fire is applied during the pressure, and therefore no irritating part of the seed finds its way to the oil. The yield, however, is 10 per cent less than that obtained by the following method. In this the seeds are husked, crushed and pressed as before. At the time of pressing, fire is placed under the machine, the heat from which liquefies the oil and increases the yield, with which, however, a certain portion of the irritating or injurious part of the seeds is mixed. It is then bleached and boiled as before, and filtered with the addition of animal and vegetable charcoal. Some of the jails in India employ many of the prisoners in the manufacture of castor oil. The cleaning and grading of the seeds are done by females, who first remove all extraneous matter, such as dust, pebbles and foreign seeds, and who then, by means of sieves with different sized meshes, grade the seed into four sizes. The splitting of the shell is done with a machine, which consists of two smooth iron rollers placed parallel to one another and working toward one another. It is worked by hand by a simple arrangement of cogwheels. One of the cylinders or rollers is fixed, the other is movable by a screw adjustment. By means of the latter contrivance the space between the cylinders can be regulated to the required distance. The space is increased or diminished according to the size of the seed about to be split. A wooden box is placed above the cylinders to hold about eight or ten pounds of seed at a time. These cylinders are about two feet long, so the process of splitting goes on very rapidly. The seed is passed on to the winnowers, who separate the husk from the kernel on large masonry platforms. Sunning is a very necessary step in castor oil manufacture, not only to dry any moisture there may be in the kernel, but to liquefy and facilitate the exit of the oily matter. When the kernel is crushed it is put into canvas bags, which are placed alternately with iron plates into the screw press. As pressure is applied to the canvas bags, the oil oozes out of them into a trough placed below. At the back of the press a fire is kept up to facilitate the exudation of oil. Each canvass bag holds about a pound of crushed kernels, and each feed of the press requires from one hundred and thirty to one hundred and fifty such canvass bags. The thick slimy oil thus obtained is passed into the hands of the

boilers, who, mixing it with water in the proportion of forty parts of oil to from five to eight parts of water, boil it in large copper pans. The boiling of the oil is, perhaps, the most delicate process of the manufacture. To know exactly when to stop the boiling is a point of knowledge acquired by great experience. Thermometers were at one time used, but the results were not so satisfactory, and the boiler is now guided by the eye and by his sense of touch. The castor oil plant is largely cultivated in Assam to feed the silkworm. An excellent paper pulp is made with the bark from the stems. The oil is frequently used by the Indian dyers, and it has the reputation of being one of the best for dressing tanned hides and skins. It is also used for lubricating all sorts of machinery, clocks, watches, etc. It is said to be the best lamp oil in use in India, giving an excellent white light, vying in brilliancy with electricity, far superior to petroleum, rape seed and all other oils, whether vegetable, animal or mineral. It is used very extensively by the great perfumers in their articles of manufacture, and it enters largely into the making of some kinds of varnish. At the Allahabad East Indian Railway Station the lamps are lighted with the gas obtained from the castor oil cake, which has been found to be an excellent material for the purpose. This cake is also highly esteemed as a manure; and it is stated that castor oil and bone meal mixed together form a better fertilizer for sugar cane than either of these manures alone. In the years 1891-92 the quantity of castor oil exported from India amounted to 3,278,980 gallons, of which the United Kingdom took 1,884,745 gallons.—*Journ. Soc. Arts.*

#### Poisoning by Vanilla.\*

BY JAMES C. WHITE, M.D.

Poisoning by vanilla pods or beans, in the countries where this plant is cultivated, is reported as not very infrequent among the workmen. This plant is cultivated in Mexico, Central America, and the West India Islands, and also in the East. It grows best in Mexico. The beans are collected, put through a "sweating process," are turned frequently under blankets, and sometimes submitted to artificial heat until they assume a dark chocolate or blackish color. In handling these pods many of the workmen have a dermatitis produced upon their hands and face, and this inflammation of the skin has been attributed to two causes. An acarus affects the pods, and formerly these cases were attributed to the irritative action of this little insect upon the skin. But this is very improbable because the inflammation comes on too rapidly, and is of a different type from that produced by the presence of any animal parasite upon the skin. In the best variety of pods no artificial means are used for coloring them. When I was writing upon this subject a few years ago I took occasion to visit the establishment of Mr. Burnett, and inquired about the workmen employed in his factory. He said that no cases of vanilla poisoning had ever occurred there, and he attributed this immunity to the fact that he used only the highest quality of pods. The greatest care is taken in the care of the highest-priced pods, and after they reach the United States they undergo often an additional treatment, if they are not quite cured. They come in sealed tin boxes. Now in the lower qualities of

\*From a paper read before the Suffolk District Medical Society.



pods it is known that an artificial method is used for coloring them black, and that the material used is the oil found in the rind of the cashew nut, called cardol. This nut is the fruit of *Anacardium occidentale*, and is grown in the West Indies largely and eaten both raw and roasted. The oriental species is called the Indian marking nut, as it has the same property of turning black any substance with which it comes in contact that the juices of the poisonous forms of *Rhus* possess, and it has likewise the same poisonous quality that they have, so that many cases of poisoning are produced by persons handling these nuts without sufficient care. Charles Kingsley, in his work on the West Indies, describes several cases where cooks and others have been poisoned by roasting them. Cardol is used to color the poorer qualities of vanilla pods, such as produced poisoning in a patient who recently came to me suffering from dermatitis venenata. They are of the poorer variety, and are worth about four dollars a pound, whereas specimens of the best qualities are worth about twelve dollars a pound. The color of both is about the same, but there is no doubt, I think, that these poorer ones have been colored by cardol.

### Baking Powder Recipes and Suggestions.

At the special request of several brother pharmacists the following recipes for baking powders are suggested, with the cost of making them. These figures are based upon the tartaric acid selling by the ton at 25c. a pound, cream of tartar at 22½c., acid phosphate of lime at 7½ cents, dried alum at 4½ cents, starch at 2½ cents, and bicarbonate of soda at 3½ cents. That these powders should keep well each ingredient should be first thoroughly dried by a gentle heat, and they should be kept securely closed in dry fruit jars, corked bottles or sealed cans.

1.  
Tartaric acid.....1 pound  
Bicarbonate of soda.....1 pound  
Starch (powdered).....½ pound  
Costs about 11¼ cents a pound.

2.  
Cream of tartar.....2 pounds  
Bicarbonate of soda.....1 pound  
Starch (powdered).....½ pound  
Costs about 18½ cents a pound.

3.  
Acid phosphate of lime.....1½ pounds  
Bicarbonate of soda.....1 pound  
Starch (powdered).....1½ pounds  
Costs about 4¼ cents a pound.

4.  
Acid phosphate of lime.....2 pounds  
Dried ammonia alum.....2 pounds  
Bicarbonate of soda.....3 pounds  
Starch (powdered).....5 pounds  
Costs about 4 cents a pound.

5.  
Dried ammonia alum.....1 pound  
Bicarbonate of soda.....1 pound  
Starch (powdered).....1 pound  
Costs about 8½ cents a pound.

To the above cost should be added the cost of the containers and the time consumed in doing the work.

The ingredients, all finely powdered, should be first sifted separately to get rid of all lumps, then the soda and starch should be well mixed together, and finally the acid ingredients should be added, and all thoroughly incorporated, either by rubbing together in a mortar, or by sifting at least three times. Flour can be used in place of starch, and is considerably cheaper.—GEORGE F. PAYNE in *Proceedings of Georgia Pharmaceutical Association*.

### Solution of Bromide of Gold and Arsenic.\*

Considerable attention has of late been directed to a so-called "compound solution of bromide of gold and arsenic" (Liquor Auri et Arsenii Bromidi), the formula of which is kept a secret (?).

A short time ago such a solution came to my notice. It was transparent and of a beautiful red color. The addition of arsenious acid solution caused it to become colorless, and after some time a metallic precipitate formed. According to the label attached to the bottle, each ten drops represented ¼ grain of gold tribromide and ¼ grain arsenic tribromide.

It is an established fact that bromide of arsenic cannot exist in aqueous solution. If brought in contact with water it breaks up into arsenious and hydrobromic acids. Furthermore, a solution of gold tribromide cannot exist in the presence of arsenious acid. The latter by its reducing properties would precipitate metallic gold from its solution. It is, therefore, necessary to convert the arsenious acid into the arsenic state before the addition of the gold salt.

A solution like the one above described may be presented as follows:

Arsenious acid.....18½ gr.  
Bromine water.....q. s. or about 5½ oz. troy.  
Gold tribromide.....24 gr.  
Distilled water, enough to make.....16 fl. oz.

Introduce the arsenious acid and 2½ oz. of bromine water into a flask or porcelain capsule and heat gently until all free bromine has disappeared. Then add bromine water, 10 to 20 drops at a time, until it will be present in slight excess, or until the solution does not become colorless after some time. Expel the excess of bromine with the aid of a gentle heat, dilute to 16 fl. ozs., and dissolve in this the gold tribromide. The result, if the oxidation of arsenious acid is complete, will be a perfectly transparent red solution, 10 minims of which contain ¼ gr. of gold tribromide and the equivalent of ¼ grain arsenic tribromide.

The oxidation of arsenious acid into arsenic acid by the bromine takes place according to the equation:



### Snakes and Pharmacy.

A paper on this subject was read at a recent meeting of the Brighton (Eng.) Junior Association of Pharmacy by C. S. Ashton in which the author went as far back as two centuries B.C., giving numerous references and quotations from such ancient authorities as Musa (a Greek physician) and Andromachus, physician to Nero. He referred also to the origin of the symbol of the serpent entwined on a staff in the Pharmaceutical arms. The story runs that Æsculapius, the Grecian god of healing, was standing, staff in hand, by the bedside of Glaucus, when a serpent crawled into the room and twined itself on the staff. Æsculapius immediately slew the reptile, but had no sooner done so than a second serpent entered the room bearing a leaf in its mouth, crawled up to its dead comrade, and immediately restored it to life. Thereafter the serpent was connected with the science of healing.

Instances were also given of ancient and comparatively modern formulæ containing the viper, one such formula being embodied in the first London Pharmacopœia, about 1654.

\* From *Notes on New Remedies*.

### Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Chemistry of Chloral Camphor.**—F. A. B. would like to know what compound is formed when camphor and chloral hydrate are triturated together in a mortar, and requests us to express the equation illustrating the combination.

Opinions differ as to the character of the liquid formed by rubbing together chloral and camphor. While Cazeneuve and Joubert claim that the optical behavior of the compound proves that chemical combination has taken place, C. Schmitt (*Jour. Chem. Soc.*, May, 1892) asserts that the camphor is merely dissolved in the chloral and does not form definite compounds with it. This is not true of all camphors, however, as borneol and menthol form definite compounds with the formulas noted below:

**Chloral Bornylate**,  $\text{CCl}_3\text{CH}(\text{OH})\text{OC}_{10}\text{H}_{17}$ . This occurs in white crystalline plates which are insoluble in water but melt at 45-55°.

**Chloral Menthylate**,  $\text{CCl}_3\text{CH}(\text{OH})\text{OC}_{10}\text{H}_{18}$ , appears as a yellowish liquid of a somewhat lighter consistency than camphor chloral. It is insoluble in water.

**Book on Diseases of Dogs.** F. H. N.—There are a number of published treatises on diseases of the dog, besides the numerous articles which appear in works on Veterinary Medicine. Among the former which may be obtained through THE DRUGGIST AND RECORD or any medical book publisher are Howden's "Management and Disease of the Dog" (\$2.00); Steel—"Diseases of the Dog" (\$3.50); and Stonehenge "On the Dog in Health and Disease" (\$3.00).

**Miscible Elixir of the Phosphates.**—M. J. G. writes: "Will you please publish in your next number a satisfactory formula for elixir, iron quinine and strychnine which will mix with water without becoming cloudy."

It is next to impossible to prepare an elixir of the triple phosphates with the use of the phosphate or pyrophosphate salts of iron, and when an elixir of the kind indicated is required it is much preferable to employ iron citro-chloride. The formula of the National Formulary (page 143) furnishes a clear, stable elixir of this kind, and we commend it to your notice.

**Precipitate in Bay Rum.** H. C., Charlestown, Mass., wishes to prevent the formation of the white precipitate in bay rum. If it is there already, filter through talc to remove. When the Pharmacopœia process of 1880 is used a little more alcohol is needed, and then allowed to stand a week or two with occasional agitation; then repeatedly filter through paper only.

**Mistura Tussis.** H. L. F., Glen Lyon.—In English this means cough mixture, and the varieties are numbered in millions.

Most probably you have fallen upon a prescription which was intended to go to a certain store and a private formula to be used; it is a famous trick.

**Gelatine Prints.** D. B., Brooklyn.—These are obtained as follows:

Bichromate of potash..... 1 part  
Refined gelatin..... 10 parts  
Water..... 100 parts

Alcohol if necessary to make an easy flowing mass. Soften the gelatin in cold water, then dissolve at 100° F. Dissolve the bichromate in warm water and add to the above, intimately mixing while hot.

This is now sensitive to sunlight, becoming insoluble in water after exposure. So all work must be done by lamplight or in a photographic dark room.

From the thick solution, while hot, flow some evenly and level over a glass plate suitable for the purpose needed, and have no air bubbles; allow to set, then dry in an oven at 120 to 140° F.

Now expose this film under a photographic negative, as though it were a sensitive paper.

Wash in warm water and you will find a positive picture in relief upon the surface of the film, because when light struck it is hardened; when observed it is soluble and washes out.

**Druggists' Insurance.** A. G. R., Oneonta, N. Y.—At present there is no co-operative druggists' fire insurance company taking risks in this State. There is a co-operative fire insurance company organized by retail druggists in Wisconsin, but this company has not extended its operations to this State.

**Drug Store Licenses in New York City.**—"Subscriber" asks what licenses are required to start a drug store in this city.

In the first place, a license must be obtained from the New York City Board of Pharmacy. This can be obtained either by examination before the board at its regular meetings, which occur at the college on the first Monday in the month, at 10 o'clock A.M., or by registration either on the certificate of some other board in this State, or of a college of pharmacy. The secretary of the board is Dr. William Balser, 218 East Thirteenth street. The fee for registration on examination is five dollars, for registration on certificate of any other board in this State two dollars.

A United States liquor license, costing twenty-five dollars, is also required, while under a recent enactment every druggist in the State is compelled to take out a druggists' liquor license, which costs thirty dollars per year.

**Ink Erasers.** J., Scranton, Pa.—The liquids now much sold as able to remove any kind of ink are—Solution of chloride of lime in water, solution of chlorinated soda U. S. P. or a slight variation, as published in our edition of Dec. 7. The other bottle is an acid, sometimes hydrochloric, acetic, or the old standby, oxalic.

**Curling Creams.** O. M. K., Beaver, Pa.—Curling creams, are similar to Band-aid lines of old. On December 14 a very full line of skin protectives was published, any one of these formulæ if made a little stiffer in its mucilaginous base will answer for the purpose asked about.

**Rubifoam** and other liquid dentifrices have for foundation either soap or quillaya solution, sweetened, flavored, and colored to meet the demand.

No. 410 National Formulary..... 3 i  
Alcoholic solution of soap as made for soap  
liniment..... 3 ii  
Glycerin..... 3 iv  
Oil wintergreen..... 3 ii  
Oil sassafras..... 3 ii  
Water to furnish..... 3 vi  
Tannin (if desired)..... gr. x  
Carmine or tr. cochineal..... q. s.

**Syrup Asaram Comp.** C. A. F., Lan-

caster, Pa., desires a formula for syrup asaram compound.

It may be found as No. 352 of National Formulary.

**Elixir Iron, Quinine and Strychnine**—D. G., Minneapolis, Minn., wants to get an elixir from quinine and strychnine which will appear like a certain proprietary article. No. 65 National Formulary yields a nice product, which keeps well, looks fine, and is largely put up as elixir phosphate of iron, quinine and strychnine.

**Campbell's Cholera Cordial.** T. D., Paterson, N. J.—We do not know the composition of the preparation. An active stimulating cordial for use in Summer colic, severe diarrhoea and similar troubles is used in many cities from No. 41 National Formulary. If to be put up regularly it should be largely diluted, and catechu or kino may be added.

**Witch-hazel Liniment.** A. F. S.—There is no more suitable witch-hazel liniment for internal and external use than the distilled extract of the twigs and leaves of witch-hazel. For use in veterinary practice an extract made with wood-alcohol or alcoholene would answer all purposes. The extract can be purchased from different makers in the Eastern States, whose names will be gladly furnished on application to this office.

**Embalming Fluids.**—F. W. requests a cheap and efficient recipe for an embalming fluid, also name and price of some good work on embalming. A saturated solution of sodium arsenite is regarded by most embalmers as the cheapest and perhaps the most efficient of embalming fluids. The compound known as Morell's Embalming Fluid is a solution of this kind, rendered slightly opalescent by the addition of carbolic acid. The formula is as follows:

Arsenous acid..... 14 oz. av.  
Caustic soda..... 7 oz. av.  
Carbolic acid..... a sufficient quantity.

Water..... enough to make 100 oz. av.  
Dissolve the arsenous acid and the caustic soda in 40 ounces of water by the aid of heat. Allow the solution to cool, and add to it just enough carbolic acid to render it opalescent. Finally add enough water to make the product weigh 100 av. oz.

A valuable monograph on the subject of embalming appeared in the series of Wood's Monographs published by Wm. Wood & Co., West 10th street, New York City.

## Bibliography.

A **DICTIONARY OF MEDICAL SCIENCE.** Containing a full explanation of the various subjects and terms of Anatomy, Physiology, Medical Chemistry, Pharmacy, Pharmacology, Therapeutics, Medicine, Hygiene, Dietetics, Pathology, Surgery, Bacteriology, Ophthalmology, Otology, Laryngology, Dermatology, Gynecology, Obstetrics, Pediatrics, Medical Jurisprudence and Dentistry, etc., etc. By Robley Dunglison, M.D., L.L.D., late Professor of Institutes of Medicine in the Jefferson Medical College of Philadelphia. Edited by Richard J. Dunglison, A.M., M.D. New (21st) edition, thoroughly revised, greatly enlarged and improved, with the Pronunciation, Accentuation and Derivation of the Terms. In one magnificent Imperial octavo volume of 1188 pages. Cloth, \$7; leather, \$8. Philadelphia: Lea Brothers & Co., 1893.

For sixty years "*Dunglison's Medical Dictionary*" has been the standard authority in medical terminology, and twenty-one editions have been required to meet the ever increasing demand. In no previous issue have the changes and additions been so great. Forty-four thousand new words and phrases have been added to place the work in conformity with the most advanced terminology of the time. Everything obsolete has been excised, yet the

work contains about 100 pages more than its predecessor. The page has been enlarged, so that this great work is still comprised in a convenient volume. For the first time pronunciation has been introduced, being indicated by a simple and clear phonetic spelling. Derivation, an unexcelled aid to remembrance of meanings, is also thoroughly given. The full and explanatory definitions for which "*Dunglison*" has always been noted have been expanded to include much valuable and practical information not always easily found elsewhere. Thus, under Diseases are given their symptoms and treatment; under Drugs, their properties and doses; under Poisoning, the symptoms, antidotes and treatment. Numerous tables enrich the alphabet and place an immense amount of information clearly and conveniently at hand. Examples may be found in the tables of doses and bacteria. It is safe to call Dunglison's *Medical Dictionary* an indispensable book for students, practitioners, pharmacists, dentists and all concerned with any of the medical sciences.

**DUANE'S STUDENTS' DICTIONARY OF MEDICINE.** The Students' Dictionary of Medicine and the Allied Sciences. Comprising the Pronunciation, Derivation and Full Explanation of Medical Terms, together with much collateral descriptive matter, numerous tables, etc. By Alexander Duane, M.D., Assistant Surgeon to the New York Ophthalmic and Aural Institute; Reviser of Medical Terms for Webster's International Dictionary. In one square octavo volume of 658 pages. Cloth, \$4.25; half leather, \$4.50; full sheep, \$5. Philadelphia, Lea Brothers & Co., 1893.

Dr. Duane's experience as a lexicographer and his accurate scholarship are sufficiently attested by his position as Reviser of Medical Terms for Webster's International Dictionary. In the present work he has undertaken to provide medical students with full information concerning every word they will meet in acquiring their professional education. The vocabulary is exceedingly liberal, and its fulness is paralleled by the treatment accorded to each word. The definitions are of the "explanatory" style, including not only a statement of meaning, but likewise much descriptive matter under headings which would be inadequately represented by a definition however full. Thus, under diseases are given their causation, symptoms and treatment; under important organs, an outline of their structure and functions; under each drug, its actions, uses and preparations, the information being arranged in logical order, so as to give a rational and connected idea of the subject. Extensive tables of Bacteria, Muscles, Arteries, Veins, Nerves, etc., are included. Each word is followed by its correct pronunciation (a new feature in works of this class), given by means of a simple and obvious phonetic spelling. Derivation, an unexcelled aid to remembrance of meanings, is likewise fully and clearly stated, Greek letters being replaced with those of the English alphabet, for the convenience of those unfamiliar with Greek. The type has been carefully selected for legibility, and each page contains an extraordinary amount of matter. Duane's Medical Dictionary is executed on a plan embodying in a high degree every qualification of value to students, and we may therefore confidently predict that it will become the standard and favorite work of its class.

The Funk & Wagnalls Co., New York, announce in a circular under date of Jan. 16 that the first edition of Volume I. of their "*Standard Dictionary*" has been covered by orders. Another edition is under way which the printers will push to completion as soon as possible.

## News and Notes.

### Random Notes of a Rambling Journey.—V.

#### SOUTHWARD FROM JACKSONVILLE.

The line of railroad south of Jacksonville is marked by an even sameness of outlook that is disappointing to tourists who have placed faith in the glowing and eloquent descriptions of Florida scenery distributed so freely by the enterprising land agents of the State. If picturesque scenery is to be found anywhere throughout Florida it must be looked for among its beautiful lakes and rivers. No picture of exotic or semi-tropical vegetation can be found anywhere in United States territory to compare with the views of forest verdure to be obtained on trips down the Ocklawaha and Indian Rivers. None of this is seen from the railroad cars, however, and the traveler who fails to ride freely into the interior and see things for himself will return with some very mistaken notions as to Florida scenery.

From Jacksonville to Palatka the train skirts the left bank of the St. Johns River, occasional glimpses of which are caught between tall pine and cypress trees, heavily draped with the soft clinging Spanish moss, which lends such an inexpressibly mournful and weird appearance to the landscape, besides exerting a depressing effect upon a person compelled to look upon them steadily for any length of time. Below Buffalo Bridge the train crosses the east bank of the St. Johns River and enters a portion of country that is regarded as one of the finest and most beautiful sections of Florida, and from which most of the oranges grown in the State are exported. Near Enterprise, a small town of some fame as a Winter resort, the train again crosses the St. Johns River at the point where it issues from Lake Monroe, and a few miles further south stops at Sanford, a thriving little city of 2,016 inhabitants. Being the practical limit of navigation on the St. Johns River and the junction of several railroads, Sanford is a city of some importance. Here I drove out to one of the large orange groves and witnessed the interesting operations of picking and garbling the fruit. Each orange is cut from its branch with a pair of short, stout scissors of special make. The proceeds of a day's collection are conveyed to the boxing warehouse, where the oranges are sorted into the different varieties of the market by an ingenious device consisting of two inclined wooden grooves or chutes, extending from a central platform and having outlets of different sizes through which the oranges pass and are conveyed to a series of boxes on benches arranged to right and left of the lesser chutes. Into the main chute on the left are thrown all sizes of the varieties of oranges known as "russet," while the receptacle on the right is reserved for "choice bright"—oranges of a clear bright color, unmarked by speck of brown. The resting place of each of the two varieties of oranges is then determined by its size, the small oranges passing through the narrow outlets near the top of the chutes and being conveyed along a tilted gutter to its appropriate box below, while the larger ones pass farther along, until an outlet large enough to permit of the

orange passing through is reached. The average yield of a grove of 2,000 trees is about 1,500 boxes, the f.o.b. value of each box ranging from \$1.50 to \$1.75 according to the wealth of the year's crop. This year the first named is the ruling price, as the crop is unusually large. The planters frequently dispose of their crops on the trees, the buyers being at the entire expense of culling, grading and shipping. One grower told me that he had this year disposed of his entire crop in this way at the uniform price of 60 cents a box.

Sanford supports four pharmacies, the proprietor of one being both a physician and a pharmacist. The two leading pharmacists are W. G. Aldridge and A. E. Phillips, and the bulk of business is divided very evenly between them. Their stores are of fair size and appearance, and each does a general business in country supplies. Mr. Phillips is apothecary to the South Florida Hospital.

The druggists of Florida appear to be greatly deficient in appreciation of the labors of the A. P. A. Committee on National Formulary. Few of them possess a copy of this valuable manual, and many are oblivious of its existence. One would suppose that the circulation of literature on new remedies and recent additions to synthetic chemicals would contribute a very general knowledge of the appearance and properties of these agents, but I found the reverse to be true, and it may be that Florida does not figure in the subscription lists of the house organs whose editors make a specialty of disseminating this kind of information. I was in a Florida pharmacy whose proprietor has figured quite conspicuously as a contributor of essays at pharmaceutical meetings, as well as a writer on galenical pharmacy, when a customer handed in a plainly written order for chrysophanic acid and was astonished to learn that the substance was unknown in that pharmacy. The clerk showed me the order as a conspicuous example of illegible writing and was disposed to question my assertion that the article demanded was a misnomer of *Chrysarobin*, an official substance of whose existence he was alike ignorant. Every day I receive fresh proof of the value of the suggestion contained in the editorial entitled "Profitable Entertainment at Pharmaceutical Meetings," which appeared in the November 28 number of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. When it comes to buying close, however, the Florida pharmacist is, to use the vernacular, "strictly in it."

Many flattering testimonials to the value of the "Weekly Review of the Wholesale Market" as an aid to close buying have reached me through traveling salesmen and others. THE DRUGGIST AND RECORD is the best and only guide to the state of the New York drug market, and no traveling salesman considers his equipment complete without it, because the majority of his customers make a point of buying their goods at the figures quoted in the wholesale price list as printed in the special issues. As a guide to market fluctuations the weekly "Original Package Prices" are constantly referred to. Many stores are sold annually in the State of Florida at figures based on the monthly prices current of this paper, the figures there being accepted as the prices at which retailers usually purchase their supplies.

THOS. J. KEENAN.

Wm. Baker, Jr., of the firm of Baker Bros., manufacturers of glassware, etc., Baltimore, has been in town during the week. He was accompanied by his wife.

## Gotham Gossip.

The rooms of the German-American Apothecaries' Society at 194 Third avenue, this city, were invaded last Thursday evening by an enthusiastic gathering of Interstate Leaguers who had come together at the invitation of the president for the purpose of discussing the preliminaries of the next special meeting of the League as well as with a view of arousing more general interest in League affairs, and to increase the membership of the local branch. The number of names on the membership roll of the New York branch now amounts to something like 340, but as only one-half of these have paid their annual dues the present voting strength of the branch at a general convention only stands at 175.

The meeting was opened by Charles A. Osmun, president, who explained the object of the gathering and urged the members present to do their utmost to make a success of the special convention of the League, which is to be held at the Ionic Room, Terrace Garden, 147 East 58th street, on Tuesday, February 6, at 10 A.M.

He was followed by Victor Kostka, State executive, who spoke at greater length on the objects of the meeting and made a number of important suggestions with reference to proposed amendments to the constitution and plan of the League, which were received with evident approval by all present. He suggested that efforts be made to reach the cutter through legislation and said: "The distribution of remedies containing potent drugs should be restricted to the legal purveyors of remedials, this being demanded as much in the interests of public safety as for the protection of the rights of druggists." M. F. Bender, who is treasurer of the branch, took a prominent part in the discussion which followed. Himself a prosperous pharmacist, he is deeply impressed with the benefits likely to accrue from a wider adoption of League principles, and only regrets that a larger number of the downtown druggists cannot be brought to see things in the same light.

Before the meeting closed a motion was adopted providing for the appointment of district committeemen, whose duties should consist of visiting druggists in their respective districts who are not already affiliated with the League, with a view of securing their attendance at future meetings.

It was also resolved to hold another meeting preliminary to the special convention. This meeting will be held on Monday, January 29, in the rooms of the German Apothecaries' Society, 194 Third avenue, and should be largely attended.

The following are accessions to membership in the local branch noted at last Thursday's meeting:

W. F. Brandt.  
L. Garfield.  
Wm. D. Corcoran.  
Alex. Gunsburg.

**New York City Board.**—At the last examination the following passed: Archie S. Dennison, Fred. Falk, Chas. Tyson, J. Henry Wurthmann, Nathan N. Lewis, Jas. Ars, Moses Katz and Felix Krumbholz. During the month 20 pharmacists were registered. The board sustained a severe loss in the death of Dr. O. G. Harrison, last Sunday, after an illness of a few days. He was present at the last examination of the board on January 8.

The old established pharmacy of Theodore Angelo, at Fourth avenue and 81st street, this city, has recently changed hands, being now owned and conducted by the firm of Reeder Bros., composed of G. T. and A. J. Reeder. They are both young men of ability, and their venture cannot fail of success.

J. Colp, of 209 Bleecker street, is one of the few New York druggists who has not felt seriously the general decline in business. His store presents a prosperous appearance, and the other evening, when a representative of the *DRUGGIST AND RECORD* called, he was busily engaged in putting away the stock of a brother druggist who had succumbed to the pressure of bad times. Mr. Colp has an able assistant in the person of Harry Heller of the editorial staff of the *Alumni Gazette*.

The drug store of Max H. Richter at Jamaica, L. I., has changed hands twice during the past six months. The pharmacy was disposed of to Wm. Gilbert, of Jersey City, in September. He did not make a success of his venture, and a week ago Mr. Richter foreclosed on the mortgage and resold the premises to his former assistant, Dr. George S. Jager. Mr. Richter himself is a leading light in the Columbia Pharmacal Co., of New York City, with laboratories at Versailles, Conn.

## OBITUARY.

DR. O. G. HARRISON.

The New York College of Pharmacy suffers a severe loss in the person of Dr. O. G. Harrison, instructor in botany, pharmacognosy, and materia medica, who died very unexpectedly, after a short illness, on the evening of Sunday, January 14. He was taken ill on the preceding Tuesday with severe abdominal symptoms, from which he afterward partially recovered. The nature of his disease could not be determined until Sunday morning, when the indications of intestinal rupture became unmistakable, and an operation was at once performed. A successful result was, however, quite hopeless, and the doctor died at half past nine the same evening. He was conscious almost throughout, and was perfectly calm and ready for death.

Dr. Harrison was an able scholar, both at the College of Pharmacy, where he was graduated in 1890, and at the college of Physicians and Surgeons, where he was graduated in 1891. In order to fit himself more particularly for pursuing the study of the structure of drugs he worked assiduously athistology during the past Summer under Professor Penhallow, at the Harvard Summer School of Science. In addition to his position at the College of Pharmacy, Dr. Harrison was the highly appreciated assistant of Dr. R. W. Wilcox at the Post Graduate Medical School, a member of the New York City Board of Pharmacy, and the editor of the *Journal of the Alumni Association*, C. P. C. N. Y., the first number of which was just about to be published. His untimely death, just when the increasing prosperity of his college seemed about to usher him into a brilliant career in his chosen line of work, must appear exceptionally hard to his relatives and friends, particularly to his young widow, to whom he was married less than a year since. As a son and husband Dr. Harrison appeared to have approached about as near as possible to the ideal. His character as a man was singularly modest and quiet, yet dignified and strong, and he was a Christian of the

sort to make even the fixed unbeliever pause and wonder if after all there was not something distinctive in the Christian character.

## Massachusetts Notes.

Hubert P. Whitmarsh, representing Dodge & Olcott, is located at 118 Milk street.

John H. Gilmore, formerly with Perham, of Lexington, is now clerking for C. A. Charles, of Malden.

By a recent fire in Canton, John W. Terrell's stock of drugs was damaged \$1,000; insured for \$2,000.

Mead, Boyden & Co., wholesale dealers in druggists' sundries, 176 Devonshire street, have assigned to Daniel C. Knowlton; liabilities estimated at \$10,000.

Fall River has had a large fire, but only one druggist suffered thereby and that was Charles A. Baker, one of the principal druggists of that city. Mr. Baker's stock was valued at \$3,000, the most of which he succeeded in moving.

Andrew P. Preston, of Portsmouth, N. H., has been making a display of his popular specialties in one of Carter, Carter & Kilham's windows. Perfumes were shown in great variety, attractively labeled, and in containers of many styles. The famous smelling salts from "Preston of New Hampshire" played no small part in this exhibit, which has been favorably commented upon by Hub pharmacists.

One of the most pleasant and best attended meetings of the Alumni Association of the M. C. P. was held at the college building on the evening of January 17. The feature of the evening was a talk on "The Methods of the Investigation of Gases." Dr. Augustus H. Gill, of the Massachusetts Institute of Technology, was the speaker of the evening. The doctor is an authority upon this question and gave a successful and instructive demonstration of the analytical methods employed in this branch of chemical research. Much credit is due to the officers of this association for the series of talks which they have arranged, and the members can show their appreciation in no better way than by a generous attendance at the remaining meetings.

Charles R. Kirby, a Worcester drug clerk, has been charged with being a fugitive from justice, but a recent hearing of the facts in the case failed to sustain the charge and he was discharged. During the trial it was learned that Kirby was formerly one of the excise commissioners of Vineland, N. J., which commission had the power to grant liquor licenses. The inhabitants of this place were opposed to liquor selling, and when the Supreme Court recently declared the commission unconstitutional the liquor dealers immediately brought suit against its members for extortion. This movement was successful and two members of the commission were arrested in New Jersey, prior to Kirby's arrest. In ordering his discharge the court stated that Kirby was not a fugitive from justice, and that the only way for the New Jersey authorities to secure him was by requisition papers.

Our daily press still continues the dissemination of patent medicine and "cut rate" news, though recently, it must be confessed, a disposition has been shown in some of the articles to treat the "retailers' combine" more fairly. The circulars of President Canning, of the Interstate League, and of President Stiles, of the local branch, have both been summarized and commented upon, and the re-

cent meeting of the Apothecaries' Guild received its share of attention. This war of words on the part of the "cutters" seems to be carried on mainly by three of the principal dealers, namely: Houghton & Dutton, proprietors of a large department store, and Harlow E. Woodward and C. P. Jaynes. A perusal of the interviews which emanate from these sources, and comparisons of the same with the advertisements of these concerns, demonstrate that the former are but a continuation of the latter. A peculiar feature of the "cutters' argument, an inconsistent one, is the concern which they profess to show for the welfare of the wholesaler, and it is alleged that the jobbers' connection with the Detroit plan is "suicidal policy." If this be true, as well as the boast of the "cutter" of the ease with which goods can be secured from proprietors, why then should the "cutter" be exercised as to the jobbers' interest? Is not this a confession of weakness? The meeting of the Apothecaries' Guild, which was held on 12, was most creditable to Boston pharmacists both in point of numbers and in enthusiasm. Delegates were appointed to attend the coming New York meeting and many favorable reports were received from other Eastern branches. The retailers of Springfield are being organized and will send a delegation to New York. Providence and Worcester will do likewise, and it is expected that Lowell will take similar action. New Hampshire now has three active branches of the League, and some delegates from that State are assured. New England pharmacists are much interested in the success of this coming convention.

## Michigan Mention.

Harris & Savage, druggists at Vanderbilt, have made an assignment for the benefit of their creditors. No statement of assets or liabilities has been made.

Miner E. Keys, a graduate of the Philadelphia College of Pharmacy, will shortly start a drug store corner of E. Fort street and Campau avenue, Detroit.

The suit of the State Pharmacy Board against Albert F. Meloche of Belding, who was charged with personating his brother and thus obtaining a druggist's certificate, has resulted in Melroche's acquittal.

The Brown Pharmacy Company filed articles of incorporation last week at Detroit with a capital stock of \$10,000, of which \$5,000 is paid in. The incorporators are William J. Brown, James G. Donnelly and George W. Brown.

E. C. Kinsell, pharmacist at 752 Michigan avenue, Detroit, will soon occupy the new quarters at 26 Michigan avenue, which is in the heart of the city. S. F. Trizelle, who formerly occupied this store, is now located at 4 and 6 Gratiot avenue.

The Detroit Metric Granule Company elected the following officers last week: President, William A. Gavett; vice-president, George Dingwall; secretary and treasurer, James C. Wheeler; manufacturing department, Fred. H. Wheeler, and medical adviser, Dr. O. W. Owen.

The annual meeting of the Antrim Chemical Company and the Burrell Chemical Company, whose works are located at Antrim, was held last week at Detroit. The following officers were elected: President, Joseph H. Berry; secretary and treasurer, Lee Burt; and manager, Ebert J. Burrell.



An attempt was made last week to rob the drug store of C. K. Trombly at Detroit by breaking a rear window. The noise of falling glass attracted a policeman, who arrested Fred. Kliz, Theodore Conture and William Singer. Kliz was tried and sentenced to forty-five days' imprisonment. The other two will be tried later.

At the annual meeting of Parke, Davis & Co. the resignation of J. B. Russel, superintendent of the works, was handed in and accepted. J. T. Smedley was elected to fill his position on the board of directors, and Treasurer Henry Wetzel is the new superintendent. Mr. Russel will go to New York about February 1 and will associate himself with A. J. White, capitalist. He still retains his stock in the Detroit firm. He has held the position of superintendent for five years and was highly successful.

### Pennsylvania Pharmacists.

Druggist Kline is now doing business in his new store on Main street, Wilkes-barre.

The drug store of E. S. Robins, Jr., & Co., at Wilkesbarre, was recently closed by the sheriff.

Wilson & Work's drug store at New Florence was robbed of a lot of goods and some money recently.

John Harrington, son of Captain Francis H. Harrington, of Boston, Mass., is located in the drug business at Stoughton.

Jacob M. Baer has been admitted as partner in the drug and apothecary business of James T. Shinn, Philadelphia.

Burglars entered the drug store of Dr. Hotchkiss, at Edinboro. The safe was blown open and \$200 in money was stolen.

The Kirwan drug store on East Market street, Scranton, has been purchased by Edward Reap, of Pittston, and will henceforth be conducted by him.

The drug store of C. W. Nick, Erie, was burglarized recently. A Flobert rifle, a dozen razors, boxes of cigars and a small sum of money, were stolen.

J. H. Kirk's drug store, Seventh street and Concord avenue, Chester, is rapidly being roofed, and when completed will be one of the handsomest drug stores in that city.

Owing to ill health William Camm, the well known De Kalb street druggist, Norristown, has sold his business to William H. Campbell, of Philadelphia.

### Southern Siftings.

W. S. Johnson has purchased the drug stock of W. F. Grasty, of Henderson, Ky.

J. G. Weatherford has sold his drug store in Hustonville, Ky., to Felix B. Twidwell.

The turpentine firm of Peacock & Kemp, of Homesville, Ga., has changed to Peacock & Myers.

Sherry & Wormwood, druggists of Rochester, N. H., have made an assignment in favor of John Sherry of Dover.

The drug stock of McKay & Adams, Tyler, Tex., has been attached by the Meyer Drug Company, of St. Louis, Mo., for a debt of \$4,000.

A. E. Keisling, well known of late of the firm of Hertz & Keisling, druggists of Houston, Texas, has purchased the Lankford drug store, and is putting in a complete stock of drugs and chemicals of all descriptions.

C. T. Nevin's drug store, Halifax, Nova Scotia, was recently entered by burglars and goods worth about \$100 were stolen.

### Why Mr. Hogeey Got No Gas.

J. H. Hogeey, the popular south side, Chicago pharmacist, has a servant Bridget, who is very industrious. While Bridget was washing off the steps of Mr. Hogeey's Vernon avenue residence along comes an employee of the gas company, who wishes to enter the house to read the gas meter. He had a thick book under his arm, in which he is wont to register the figures of the various meters which he examines. Unfortunately, he is an Englishman, with a pronounced cockney accent, and this is the conversation that followed:

"Good morning, madam. Ah would like to read the gaas bill."

"I've to cuke the breakfast, an' have no time now to listen to the gospel."

"But it's me juty, good woman. I must read the gaas bill an' you must let me. Allow me to enter."

"Divil a sthep. Come agin when I've no worruk an' I'll listen to yer gospel."

The gas man reported that he was not allowed to enter the residence and the company removed the meter before the error was discovered.

Dr. Guido Bacelli, who has accepted the portfolio of Public Instruction in the new Italian cabinet, is one of the ablest members of the new government. He held the same office under the previous administration, and his discharge of its duties was characterized by a brilliant and vigorous policy. Dr. Bacelli is the professor of clinical medicine and president of the Accademia Medica in Rome.

Bromidia has been the cause of a death in a London hospital. A nurse gave an ounce and a half of it to a patient instead of a drachm and a half.

## CORRESPONDENCE.

### Otto of Roses.

Editor of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD:

As we believe that America takes about one-third of the total quantity of otto of roses produced we have no doubt that a summary of the results found on testing some samples of this article in our laboratory will prove of interest to the trade generally. The heavy advance in the price of the new season's crop will without doubt tend to encourage adulteration of the article, the chief agent used for this purpose being the so-called "Indian Geranium Oil"; alcohol, spermaceti, and paraffin being also added more or less, in the endeavor to bring the freezing point and S. G. of the adulterated article nearer those of the pure otto. In fact, to such an extent had the use of geranium oil for this purpose grown that five years ago the Bulgarian Government refused to allow it to be imported, although the temptation to obtain a high price for an adulterated article still leads, however, to considerable quantities being imported *sub rosa*.

The following are the specific gravity, freezing point and rotatory power of three samples of otto, Nos. A and B, being those of a large grower, and can be taken as indicative of what a pure otto should

be, while sample C is that of another large dealer, representing his new season's crop:

	Sample A	Sample B	Sample C
Specific gravity....	1892.	1893.	1893.
Freezing point....	21° C	21.5° C	20° C
Rotatory power			
100 MM (D).....	-2.5° to -2.7°	-2.5° to -2.7°	-1.5°

In the above tests the specific gravity was taken at a temperature of 86° F. (30° C.) the temperature usually employed in Bulgaria. The variation of sample C from the standard of purity as shown by A and B can be accounted for by the fact that it is impossible to put even 5 per cent. of geranium oil in otto without changing the S. G., as the S. G. of the former oil is between 0.890 and 0.895, while pure otto is .850 to .855. "Indian geranium oil" also lowers the freezing point materially, and as regards rotatory power, while genuine otto possesses a levorotatory power of say -2.5° to -2.8°, geranium oil is almost inactive, according to our experience (although one authority gives a rotation of (-0° 20'); consequently the addition of geranium oil will decrease the levorotatory power.

We regard the polarimeter as practically indispensable in the testing of otto and other essential oils, if its readings are intelligently interpreted and considered in conjunction with the other chemical and physical characteristics, but we have seen some of the largest buyers of otto depending entirely upon their "nose" in selecting from a number of samples and declaring they could detect the presence of even 8 per cent. or 5 per cent of geranium in the otto. As an example of the fallacy of this method a leading buyer selected in our laboratory a sample of otto as pure which contained 10 per cent of geranium, in preference to a genuine otto that was entirely free from any adventitious matter. We are quite aware of the fact that otto produced in various districts of Bulgaria, etc., differs somewhat from the above in specific gravity, freezing point and rotatory power, although quite pure, but the differences are so slight that they are not likely to mislead any scientific chemist.

The extensive contracts placed by us for otto owing to the very large quantities used in "Vinolia" soaps, perfumes, etc., and which have partly contributed to the short supply on the general market and consequent advance of price during recent years, compel us to take every precaution that chemistry can suggest to enable us to obtain a genuine and pure otto, and although the present advanced price, even to the largest buyers, means an extra cost of some thousands of dollars on our annual output, yet we have found it to our material advantage to use only the very purest and absolutely genuine article. In the long run not only does adulterated otto fail to afford the same satisfaction, but the increased quantity it is necessary to use to obtain the same results as gained with the genuine article means an ultimate higher expenditure than if pure otto alone is used.

We have gone into this matter carefully and believe manufacturers will find, as we have, that, in buying the adulterated article at the lowest price offered for large contracts, the otto comes out far more expensive after allowing for the adulterants than would the pure article even at the present high price.

BLONDEAU & CIE.,  
78-77 Watt Street,  
New York, U. S. A.,  
and Ryland Road,  
London, N. W.

## Trade Notes.

### Against Fraud.

The Liebig's Extract of Meat Company, Limited, call attention, on page 17, to the distinguishing marks of the genuine extract, which consist of the signature of Justus Von Liebig, printed in blue, both on the labels and on the wrappers. Druggists are asked to aid the manufacturers by keeping the genuine article.

### For the Cure of Obesity.

Druggists can add a profitable specialty to their list by laying in a stock of Dr. Edison's obesity preparations. These consist of Obesity Pills, Obesity Fruit Salt and Obesity Bands. Extensive advertising has been contracted for in the daily newspapers during the coming year, and the demand will be maintained by show cards and other means of display. A supply of show cards for display in windows can be obtained on application to Loring & Co., 2222 Hamilton place, Boston, Mass.

### System in Business.

This cannot be followed by pharmacists at its best unless a "Boston Petty Ledger" is used in the filing of bills. The illustration on page 7 explains its operation. For a New Year purchase this cannot be surpassed, its small cost bringing it within the reach of all. Write to A. G. Moore & Co., 47 Court street, Boston, inclosing \$3, and receive one by mail.

### Beautiful Ceilings.

The new style of ceiling and wall of portable steel introduced by the Kinnear & Gager Co., of Columbus, Ohio, has much to recommend it to the notice of pharmacists, as indeed to all progressive merchants. It has no equal in either wood, plaster or metal, and is well adapted for use in all classes of buildings. We cannot do better than advise all who are contemplating a change in their store and fixtures to write to the Kinnear & Gager Co. for catalogue and prices. An illustration of a favorite design will be found on page 9.

### Rubber Water Bottles.

Those of our readers who are undecided as to where to purchase rubber water bottles are invited to scan the advertisement of Whitall, Tatum & Co. on page 8 of this issue.

### Witch-hazel Jelly.

The witch-hazel preparations have attained wonderful popularity with the public, the mere name "witch-hazel" being sufficient in many instances to bring about a purchase of some liniment or embrocation having nothing further to recommend it. How well this operates in the case of a trustworthy article like the "Witch-hazel Jelly" of the Mayel-Hopp Co., Cleveland, O., is known to every druggist who handles it, and it is not surprising that the sales of this elegant preparation are rapidly increasing. Witch-hazel Jelly can be had from jobbers in collapsible tubes at \$1.75 per dozen. A note to the manufacturers, the Mayel-Hopp Co., Cleveland, O., will bring a sample.

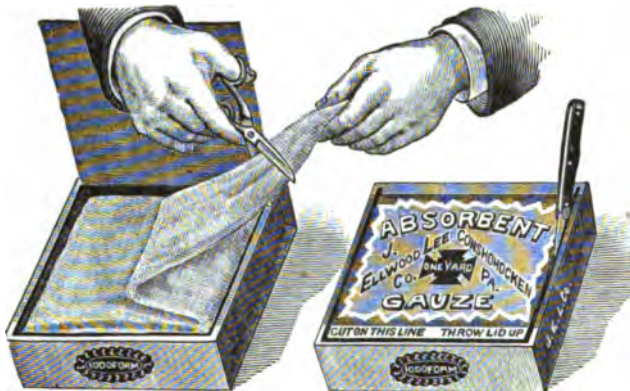
## Dispensing Corrosive Substances.



One of the difficulties about horn spatulas is their tendency to warp when in use. This tendency has been largely overcome by a clever device of Whitall, Tatum & Co. This consists in affixing a solid cocoa wood handle to the spatula. This not only has a tendency to prevent the horn from warping but furnishes a substantial handle with which to manipulate the spatula. In both these respects the new spatula is a marked improvement on the old one. As shown in the accompanying illustrations these spatulas are made with either straight or crooked blades, the latter being considered preferable by some dispensers.

### Lee's New Air Tight Carton.

This new carton has become within a few weeks very popular as a container



LEE'S NEW AIR TIGHT CARTON.

for gauze, many of the large hospitals adopting the container for the simple reason that a fresh package may be opened for every dressing of operation, and they being divided up into smaller packages there is nothing lost by waste. The gauze in the large packages, from frequent openings, exposures and handling for different cases and operation, soon deteriorate and become sour. This is the reason why operators do not have the same success when using up the latter part of a tub of gauze, or a large roll, that they do when the package is first opened and the fresh material is used.

In the manufacture of these little cartons the point is made that the gauze is first wrapped in waxed paper, and then placed in these cartons, and the opening cemented shut. This makes the package air-tight, but in order to make it doubly so the whole carton is plunged into a bath of melted paraffine, and not only once is this done but several times, until the carton has become completely glazed over with the wax.

The J. Ellwood Lee Co., who are introducing the new container, claim that the package is at once the least expensive and most practical of gauze packages, and announce that they will be pleased to mail a sample carton to any druggist or dealer who may apply for the same, as they are

anxious to have the package seen in order to test its utility. The firm may be addressed at Conshohocken, Pa.

### Cocaine "Boehringer."

The merits of Boehringer & Soehne's Hydrochlorate of Cocaine have been so well attested to by physicians and chemists of eminence as to render approbation on our part needless. Attention is here directed to the advertisement of the firm on page 10.

### A Hint to Purchasers.

A valuable hint to intending purchasers of drug store fixtures, fine show cases, etc., is given by Pynn & Cameron, the well-known fixture men of Boston. They advise druggists to send to their address at 87 Havershill street, Boston, for estimates and prices before closing contract. The hint should be acted upon; a postal card will do.

### The Question of Quality.

The question of quality is of paramount importance when it comes to medicine. This is particularly true of capsules, for if a capsule be made poorly or of poor quality materials the capsule may dissolve slowly or not at all, thus retarding or altogether nullifying the action of the medicament contained in it. This is the feature which Dundas Dick & Co. have always borne in mind, and it is to this fact that the high reputation of their products is due. They also exercise the same care in the selection and compounding of the drugs which they put into their filled capsules.

The soft capsule which Mr. Dick was the first to make, and the name of which he copyrighted, offers peculiar advantages shared by no other capsule.

### A Catalogue Will Explain

The different kinds of suspensory bandages made by the Ware Manufacturing Co., Camden, N. J., and druggists who are close buyers and interested in these articles will be rewarded by dropping a request for one by postal to the address given.

### "Everything in Sundries"

Is how A. Ashfield Baker refers to his depot for the various specialties of the Norwich Pharmacal Co., Fels & Co. and numerous other manufacturers at 140 William street, New York. A mail order addressed to Mr. Baker for any new or old sundry not stocked by other houses will be promptly filled. He should be given a trial order.

### Beef, Wine and Iron in Bulk.

This can be obtained best from Henry K. Wampole & Co., manufacturing pharmacists, 441 Green street, Philadelphia. Every information as to packages, price, and manner of packing will be gladly furnished on request to any one mentioning this paper. Attention is directed to their announcement on page 33.

### Kefaline-Billroth.

The following scale of prices for kefaline-Billroth has been added to the monthly



# Hard Times

—and—

## Digestive Ferments

Money is Close

Business Dull

Workmen Unemployed

The Sequence

Low Prices

WE have met these conditions by making a general reduction in prices of Pepsin, Pancreatine, etc. A one-ounce bottle of Cudahy's "Rex" Brand Pepsin, 1-3000 U. S. P. 1890, Soluble, Non-Hygroscopic and free from Peptone, is now sold to the Trade for 60c. Pancreatine at same price, Essences, Tablets, Glyceroles, etc., etc., at a corresponding reduction. Sold by Jobbers. Samples free.

tion in prices of Pepsin, Pancreatine, etc. A one-ounce bottle of Cudahy's "Rex" Brand Pepsin, 1-3000 U. S. P. 1890, Soluble, Non-Hygroscopic and free from Peptone, is now sold to the Trade for 60c. Pancreatine at same price, Essences, Tablets, Glyceroles, etc., etc., at a corresponding reduction. Sold by Jobbers. Samples free.

The Cudahy Pharmaceutical Co.

NEW YORK BRANCH

57 North Moore St.

South Omaha, Neb.

Our illustrated Booklet, from "Ranch to Table," a write up of the Cattle industry on the great plains, from the "Branding of the Maverick" to the "Round Up" of the prime steer into Cudahy's "Rex" Brand Extract of Beef, sent on request.

## J. ELLWOOD LEE CO.,

Manufacturers and Exporters of



Levis Metallic Splints,  
Absorbent Cotton,  
Wool, Lint, Sponges,  
Roller Bandages,  
Antiseptic Gauzes,  
and Dressings.

Surgeons' Silk, Cat Gut and  
Silk Worm Gut Ligatures,  
Clinical Thermometers,  
Needles, Hospital  
Supplies, etc.

CONSHOHOCKEN, PA.

The World's Columbian Exposition  
has given to this Company the  
five highest awards over all  
competitors as follows:

- 1st. For Woven Flexible Catheters.
- 2d. For Surgeons' Silk and Ligatures.
- 3d. For Lee's Metallic Splints.
- 4th. For Antiseptic Gauze in lass Containers.
- 5th. For Gen'l Hospital Supplies.



## ADVANTAGES. ∴

The "ALPHA" and the "OMEGA" SYRINGES are perfectly simple in construction.

They have no more parts than the old style or ordinary Syringes.

They entirely obviate the intermittent, and in many cases, painful action of Pump Syringes.

They absolutely prevent the admission and consequent dangerous injection of air, so common with all intermittent or old style Syringes.

Unlike all Fountain, Rubber Bag or Pump Syringes the flow is not only continuous, but can be made either gentle or strong at the will of the user, the pressure of the thumb and forefinger being sufficient to produce a full stream.

The steady flow can be increased, lessened or stopped at will.

The continuous flow of the injecting fluid through the nozzle while the Syringe is in use prevents the fecalized fluids from being drawn back into the rubber bulb and tube, which often happens in the use of intermittent Syringes, rendering them offensive.

"Prices Current" of the special issues: 1 lb. cartons, per lb., \$10.40; 10 lb. cartons, per lb., \$8; tablet triturates, per 1,000, \$8; vin de phosphate, per doz., \$9.

### Artificial Limbs.



The illustration given herewith is descriptive of an artificial limb designed and manufactured by Geo. R. Fuller, of Rochester, N. Y. Mr. Fuller also makes a specialty of the manufacture of crutches, trusses, elastic stockings, etc., and has a reputation for turning out thoroughly first-class goods at extremely low prices. We are aware that our readers are frequently asked by some unfortunate person who has suffered the loss of a leg or arm for the address of a trustworthy manufacturer of artificial limbs, and a note should be made of Mr. Fuller's address. He can be confidently recommended for this class of work. Information as to terms, etc., can be obtained by addressing him at Rochester, N. Y.

### Worthy of Attention.

Druggists who have not yet seen the 1894 catalogue of Hagerty Brothers & Co., which is a well bound book of handsome appearance containing many hundred illustrations of specialties in glassware and druggists' sundries, should write immediately to the publishers, Hagerty Brothers & Co., 10 Platt street, New York, who will gladly furnish a copy to any druggist mentioning this paper.

### New York & Chicago Chemical Co.

H. L. Ford, who for the past eight years has had charge of the business affairs of the New York & Chicago Chemical Co., has severed his connection with it in order to devote his attention to his private interests.

He is succeeded by Arthur S. Winslow, who has been Mr. Ford's assistant for nearly five years past, and who is thoroughly familiar with the pepsin business in all its details.

Mr. Winslow's many friends will be pleased to hear of his advancement.

The New York & Chicago Chemical Co. is now, as ever, in the front rank among manufacturers of digestive ferments, and under the management of Mr. Winslow will maintain its past record for offering the best goods at fair prices.

### The H. L. Ford Co.

H. L. Ford, late business manager of the New York & Chicago Chemical Company, is now in charge of the affairs of the H. L. Ford Co., of New York, who are offering a new specific for dyspepsia, under the name of Ford's Pastilles.

These goods are being extensively advertised in the secular press and are already in large demand.

Mr. Ford's long experience in the manufacture of digestive ferments is a sufficient guarantee as to the high standard of the new preparation.

### Helping Him Along.

A traveling salesman for a Detroit drug house was standing on the step of a little

notion store kept by a colored woman in a town in Arkansas when she came out and queried:

"Was yo' a stranger around here, sah?"

"I represent this house," replied the drummer, as he handed out a card.

"I see. Does yo' own de bizness yo'-self?"

"Oh, no."

"Was yo' de senior pawdner?"

"No."

"De junior?"

"No."

"Was yo' backin' de concern wid yo' capital?"

"No."

"Jist sent out to take orders?"

"That's all. Perhaps I can take an order from you?"

"Well, sah, if dat house has dun sent yo' clean down yere to git an order from me I ain't gwine ter be mean about it. Put me down for two bits worf of peppermint essence and drap in yere at de end of sixty days fur yo'r money!"—*Detroit Free Press.*

### Hard Times and Digestive Ferments.

Money is close, business is slow, workmen unemployed, and the consequence is low prices. The Cudahy Pharmaceutical Co. have met these conditions by making a general reduction in prices of pancreas, pancreatine, etc. A one-ounce bottle of Cudahy's Rex Brand Pepsin, 1-3000 U. S. P. 1890, soluble, non-hygroscopic and free from peptone, is now sold to the trade for 60c. Pancreatine at same price, essences, tablets, glyceroles, etc., etc., at a corresponding reduction. Samples will be sent free by The Cudahy Pharmaceutical Co., South Omaha, Neb., or by the New York branch, 57 North Moore street, if THE DRUGGIST AND RECORD is mentioned when writing. Their illustrated booklet, from "Ranch to Table," a write-up of the cattle industry on the great plains, from the "Branding of the Maverick" to the "Round Up" of the prime steer into Cudahy's Rex Brand Extract of Beef, will also be sent on request.

### Review of the Wholesale Market.

NEW YORK, January 24, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The trade in drugs, dyestuffs and chemicals is progressing moderately, a fair seasonable demand being experienced in the several departments. Buyers are operating with caution, however, and there appears to be no special consideration extended to any one article, the trade being apparently content to cover current wants without exhibiting any interest of a speculative character. During the week about the usual number of price changes have occurred, though in most instances they have been in favor of sellers.

ALCOHOL is in fair steady demand with \$2.24 @ \$2.28 asked for grain as to quantity, less the usual rebate. Wood is passing out freely at 90c. for 95 per cent., 95c. for 97 per cent. with a discount of 2½ per cent. on 5 bbls. or more when taken in one lot.

ARNICA FLOWERS continue inquired for, with sales of prime goods at 11c.

BALSAM COPAIBA is slightly firmer, the quotations for Central American and Para now standing 35½ @ 40c.

BALSAM FIR, Canada, is in fair jobbing demand and firm at \$3.75 @ \$4. Oregon quoted 80 @ 85c. as to quantity.

BALSAM PERU is passing out freely into channels of consumption, though holders are firm at \$1.40 @ \$1.60 according to quality.

BALSAM TOLU is in moderate request at 25 @ 27c.

BARKS.—Buckthorn is offered sparingly and held at 7½ @ 9c. Cascara is easier at 4½ @ 5c.; prices are irregular. Soap is developing a firmer tendency, though it can yet be purchased at 3¼ @ 3½c.

BUCHU LEAVES, short, are in good demand, with full package lots bringing 12c.

CACAO BUTTER is in good demand, but the market appears destitute of stock. The limited quantity available is held at the full previous range of 32½ @ 33c.

CANTHARIDES are in better jobbing request, but quotations are nominally unchanged.

CASSIA BUDS are inquired for and numerous small sales are reported at 18½c.

CASTOR OIL has sold liberally at the quoted range.

CHAMOMILE FLOWERS, German, have received attention during the week and among other transactions we note one sale of 500 pounds at 18½c.

COD LIVER OIL, Norwegian, continues in good jobbing demand with sales at the range of \$19.50 @ \$22 as to brand.

CUBE BERRIES are in better demand and firmer at the quoted range. Ordinary are yet held at 16 @ 18c., SS at 21 @ 23c. and Powdered 20 @ 30c.

CUTTLE BONE continues in fair request and steady at 11 @ 11½c. for Trieste.

ERGOT appears to be attracting increased attention, but values are practically unchanged, good grades of German being quoted 25 @ 28c., and Spanish 28 @ 32c.

JABORANDI LEAVES are offering with greater freedom, but the fact that stock of an undeniable kind is offered in many instances is an obstacle to trade. We quote the range at 20 @ 25c.

LYCOPodium is in good jobbing demand at 56 @ 58c. for Politz.

MANNA continues inactive with 82 @ 83c. quoted nominally for large flake, and 34 @ 35c. for small; sorts are held at 27 @ 28c.

MORPHINE continues in active consumptive demand at the quoted range.

OPIMUM has developed no movement of importance, the distribution being lighter and the market less firm than during the week previous. Single cases are still quoted \$2.35, though it is thought by some dealers that \$2.30 would purchase. For jobbing quantities \$2.35 @ \$2.40 is asked, and a moderate distribution is reported at these figures. Powdered is unchanged at \$3.10 @ \$3.15.

QUININE is in better demand since the appreciation in prices, and the position of the article is firm with prices upon the basis of 21½ @ 22c. cash and regular for foreign brands, 22½c. from manufacturers and 25c. for domestic in quantities exceeding 1,000 ounces.

SENNA continues moderately active in a jobbing way with, however, no quotable change in price.

TONKA BEANS.—Angostura are in improved demand, and firm with the jobbing quotation at \$1.80 @ \$2 as to quantity.

VANILLA BEANS, cut, are in limited supply, and held at \$4.50 @ \$6.

### DYESTUFFS.

CUTCH has advanced to 5 @ 5½c. for SM ex-store, and sales at the inside range are reported.

DIVI DIVI is firm with a fair jobbing trade at \$60 @ \$65 for prime, according to quantity.

GAMBIER is selling with some freedom in jobbing quantities at the range of  $4\frac{1}{4}\%$  @  $4\frac{1}{2}\%$ . In a large way  $4\frac{1}{4}\%$  is the lowest price named.

SUMAC.—Sicily is steadily held at \$75 @ \$80 with small sales reported at this range.

#### CHEMICALS.

ACETATE OF LIME is held at full previous prices with a moderate demand experienced for both Brown and Gray.

ARSENIC, white, is in good inquiry, but prices are firm owing to dearth of material. We quote the range from  $3\frac{1}{2}\%$  @  $3\frac{3}{4}\%$  as to quantity.

BLEACHING POWDER, German, is firmer,  $2\frac{1}{4}\%$  being now generally required, while English is yet obtainable in small quantities at  $2\frac{1}{2}\%$ .

BLUE VITRIOL does not vary from  $3\frac{3}{4}\%$  @  $3\frac{1}{2}\%$  with numerous sales at this range.

BRIMSTONE marks a quiet market; crude seconds are scarce and held at \$19.50 @ \$20, otherwise there is no new feature of interest to report.

CAUSTIC SODA continues in steady fair demand with small sales of 70 per cent. at \$2.80.

CHLORATE OF POTASH is in somewhat better demand, though prices are maintained at the previous range of  $14\frac{1}{4}\%$  @  $15\%$  for crystals and  $15\%$  @  $15\frac{1}{4}\%$  for powdered.

CITRIC ACID is quiet, but without offering any below manufacturers' prices. Barrels quoted  $43\frac{1}{2}\%$  and kegs 44c.

CREAM TARTAR continues dull with values unchanged,  $17\frac{1}{2}\%$  and  $18\%$  being still quoted for crystals and powdered respectively.

NITRATE OF SODA continues firm at the recent advance and nothing offers under \$1.95.

SAL AMMONIAC, White Grain, is improving in tone and  $6\frac{1}{2}\%$  @  $6\frac{3}{4}\%$  is now quoted generally.

QUICKSILVER meets with a moderate sale at the range of 45 @ 46c.

SULPHURIC and TARTARIC ACIDS are without important change; a moderate business is reported at quotations.

#### ESSENTIAL OILS.

ANISE is strengthening in tone and \$1.45 @ \$1.50 is now required generally.

BERGAMOT is steadily held at the quoted range.

CAJEPUT is quiet, without, however, quotable change in price.

CLOVE is developing a firmer feeling and has been advanced by a number of dealers to  $52\frac{1}{2}\%$  @  $53\%$  for large quantities.

CUBES is dull and weak and is obtainable in instances down to \$1.70, though the quoted range is a trifle higher.

ORANGE is reported firmer in some quarters, but prices have as yet undergone no change.

PEPPERMINT is exceedingly dull and the market is regarded as weak. Bulk is offered at about \$2.50 @ \$2.55 and HGH is offering at \$2.95 @ \$3.

#### GUMS.

ALOES, Curacao, are passing out freely to consumers at the quoted range.

ASAFCETIDA is in fair jobbing request and firm at full previous values. There is a scarcity of the better grades of stock; sales of common grades at  $15\%$ .

CAMPHOR is without important change either as regards demand or price. The same may be said of chicle which continues to offer at  $28\frac{1}{2}\%$  @  $30\%$ .

SENEGAL is reported in better demand, though the quotations of the market remain unchanged.

SHELLAC appears to be in better request, several large sales having been reported during the week.

TRAGACANTH is in limited demand, but firm at full previous values.

#### ROOTS.

ALKANET has been in demand in the interval and among other transactions were noted a sale of 2,000 pounds at 6c.

IPRACAC is maintained steadily at \$1.25 @ \$1.40 as to quality, though there is momentarily little or nothing doing.

JALAP continues very dull, though the quotations of the market do not vary from  $25\%$  @  $28\%$ .

LOVAGE, prime grade, is now offering at 30c. in a quantity way; jobbing parcels are changing hands at 32c.

SARSAPARILLA, Mexican, is without new feature of interest, the market being easy at the quoted range.

SENEGAL continues very dull, but there is seemingly no urgency to realize below the point of 39 @ 40c. for either Manitoba or Minnesota.

#### SEEDS.

CANARY, Smyrna, is in limited demand and held at  $2\frac{1}{2}\%$  @  $2\frac{3}{4}\%$  for jobbing parcels.

CARAWAY, Dutch, has advanced a point and is now held at  $6\frac{1}{4}\%$  @  $7\%$ .

CELERY is in moderate request with sales at 16c.

FENUGREEK does not offer below  $3\frac{1}{4}\%$ , with the market firm at this quotation.

HEMP, Russian, is easier and sales are making at 3 @  $3\frac{1}{4}\%$ .

MUSTARD, California yellow, is in steady, moderate request, and the market is quoted firm at full previous prices.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

DRUG CLERK WANTED in a pleasant town in New Jersey; must be reliable in every respect and capable of handling nice trade. Address "Salol," care Tarrant & Co., 280 Greenwich street, New York.

DRUGGIST SALESMEN WANTED to carry side line of toilet articles; big money; please state which house now employed with. For further information address the Orisena Co., 209 State street, Schenectady, N. Y.—4.

#### POSITIONS WANTED.

SITUATION WANTED by an Ontario drug clerk, 11 years' experience, 6 in retail, 5 in wholesale; excellent references. Address C. E. Burdick, Essex, Ont.

SITUATION WANTED—Pharmacist; registered in Illinois; no bad habits; good references; moderate salary. Address "Drug Clerk," 404 E. Grove street, Bloomington, Ill.

GERMAN DRUG CLERK, graduate, desires steady situation; 14 years' experience; registered in four States; 27 years old; single. Address "Graduate," 584 Lake street, Cleveland, Ohio.

SITUATION WANTED as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

SALESMAN wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

DRUG CLERK, registered in Virginia, over 10 years' practical experience, steady and sober habits, desires position in manufacturing department wholesale house, or assistant in large retail house; references At. Address "Druggist," corner Duke and Alfred streets, Alexandria, Va.

WANTED, SITUATION.—A practical and competent pharmacist, first-class worker, neat, sober and reliable, registered in Connecticut; best references. Address "C. A. P.," this office.

DRUG CLERK, with 4 years' experience, desires a position in Connecticut; "unlicensed;" salary \$10. Address "Listem," Waterbury, Conn.

SITUATION WANTED by a young man to learn the drug business; graduated from college last June and received a degree as chemist; suitable references can be given. Address F. A. Gokey, Northfield, Vt.

#### BUSINESS OPPORTUNITIES.

DRUG STORE for rent, recently vacated by a successful druggist who has been there for five years; long lease, low rent. Brick building, 25 feet plate glass front. Address "Fine Chance," this office.

FOR SALE.—In New York City, on car line, at less than inventory, a corner drug store, near Canal street, established over 35 years; 5 years' lease; new stock, fixtures and fountain recently; a bargain. M. HOYT, 216 West 2nd street, N. Y. City.

TO DISSOLVE PARTNERSHIP.—A first-class drug store is offered for sale in a growing city. For particulars address P. O. Box 1315, Meriden, Conn.—4.

FOR SALE.—A first class drug store in a town of 1,600 inhabitants, with railroad shops; from six to eight thousand dollars paid out monthly by Railroad Co.; first class trade; no credit; average daily sales, \$25; stock invoice about \$2,000; reason for selling is age and health; apply soon. D. W. Strouse, Monon, White Co., Indiana.

FOR SALE.—Old established drug store, in Pennington, N. J.; live stand; no other drug store nearer than five miles; stock, drugs and stationery; semi-annual town; opportunity for a cash buyer; owner studying medicine. Geo. W. Scarborough, Jr., Pennington, N. J.—2.

FOR SALE.—Drug store, one of the handsomest and best paying drug stores in Pennsylvania; last year's sales \$13,000; no cutting in prices; will invoice about \$3,500; good reason for selling. Address "Salol," this office.

FOR SALE.—Handsome ash soda counter (7 feet with alab and copper sink, complete; cost to build \$45; good as new. Photo and particulars of H. J. Baringer, Jr., Chatham, N. Y.

FOR SALE.—Handsome drug store in growing town; splendid opportunity for young man with knowledge of the business; no cutting. Address P. O. Box 243, Albany N. Y.

A Sure relief for Asthma.  
**KIDDER'S PASTILLES.** Price 25 cts. by mail.  
STOWELL & CO.,  
Charlestown, Mass.

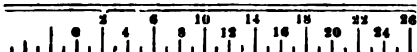
A Sure relief for Asthma.  
**KIDDER'S PASTILLES.** Price 25 cts. by mail.  
STOWELL & CO.,  
Charlestown, Mass.

#### Monograph on Flavoring Extracts.

"Ye CHIMIST," he of olden time  
Would fain have bought this book,  
But for the fact he did not know  
Which way for it to look.  
Now this excuse you may not have,  
If you will read this through;  
And also great wealth you may save,  
If you'll do as we say do.  
Just send two dollars straight to us,  
And by return express or mail,  
You'll get without the slightest fuss,  
The book that will this wealth entale

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# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIV. No. 5.

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We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

Among the changes in duties proposed by the amended Wilson bill are to \$1 per pound upon opium, 75c. upon morphine, 20 per cent. upon boracic acid, and 25 per cent. upon chloral hydrate.

The many friends of Prof. WILBUR L. SCOVILLE, of the Massachusetts College of Pharmacy, will be glad to learn that he has accepted a position on the editorial staff of the *New England Druggist*, a monthly pharmaceutical publication which has recently won deserved popularity from its hearty adoption of measures calculated to advance and protect the interests of the retail trade.

The "Minutes, Reports, Papers and Discussions of the Forty-first Annual Meeting of the American Pharmaceutical Association," comprised in a bulky pamphlet of some 870 pages, has just been issued by the publication committee of the Association. The number of papers submitted to the different sections for presentation at the Chicago meeting was considerably above the usual average, and accounts for the bulkiness of the present pamphlet. Each member of the association is entitled to one copy of the minutes, and any who may have been overlooked in the distribution should communicate with the permanent secretary at Philadelphia.

EVERY now and again we receive from some subscriber a list of names of friends and business acquaintances with the suggestion that if we send them sample copies we will be very likely to secure their subscriptions. Nothing affords us more pleasure than to act upon requests of this kind, and it is our habit not only to send the papers, but also to write letters saying that we are indebted to Mr. —, an old and valued subscriber, for the name and address, etc., inclosing the usual subscription blank. The returns, as a rule, are very satisfactory. While taking this occasion to thank a number of friends who have remembered us in this way the past month, we want also to say that similar lists from all of our subscribers will be very acceptable. If you like THE DRUGGIST AND RECORD and think it is doing you good, do what you can to extend its benefits to others.

## THE INTERSTATE LEAGUE.

THE New York City druggists who compose the local branch of the Interstate Retail Druggists' League are evidently working in good earnest for the objects they have in view. As yet, however, they are comparatively few in number and there is still a certain lack of enthusiasm displayed by many who ought to be active workers in the field. This does not arise from indifference or hostility to the League, but rather from fear that the new organization may drift into the ways of previous associations of its kind, and peter out without accomplishing the ends for which it was organized. Many in the trade have so expressed themselves and refused to be persuaded to view the undertaking in a more hopeful spirit, more perhaps because they lacked the courage and patience necessary for the work of preliminary organization than from sympathy with the movement. The latter is probably the correct explanation of the attitude assumed by these backward members of the trade, as no valid reason exists for fearing that the local branch will not prove successful. The fact that it has the support of the parent body in all its efforts to bring about a betterment of the existing condition of things in the city of New York should be sufficient to instill courage into the less resolute

mind of the craft; but even this appears to be insufficient, and general enthusiasm is yet lacking.

New York pharmacists should not lose sight of the fact that if the Interstate Retail Druggists' League, in its efforts to regulate prices in this city, accomplishes nothing beyond making the different members of the trade better acquainted with each other, much good will have been done. Ever since the failure of the ill-fated Drug Union some years ago there has been no organization of the retail trade capable of making itself felt in an emergency or when matters of trade import arose to demand attention. The consequences of this are known to all. New York pharmacists take less interest in each other's welfare or in matters affecting the trade at large than the members of any trade or profession having a like individuality of pursuit—a condition which is deplored on all sides. A remedy for this is now in sight and should be at once applied. Attend the special convention of the League on February 6.

## AN ANTIDOTE FOR MORPHINE?

A CERTAIN Dr. WILLIAM MOOR, of this city, has achieved great newspaper fame during the past few weeks by making alleged demonstrations of the antidotal powers of potassium permanganate against the toxic effects of poisonous alkaloids, and particularly of the alkaloid morphine. The matter would hardly merit notice here were it not for the fact that a few of our readers have been confused by the newspaper accounts of the alleged demonstrations, and are inclined to place a higher value on the experiments that is justified by the facts.

All who possess even a faint knowledge of chemistry are familiar with the mutual decomposition which takes place when potassium permanganate is added to organic matter, easily inflammable substances like alcohol and ether taking fire on simple contact with the salt. The claim that decomposition also ensues when a solution of the salt is added to the contents of the stomach in cases of alkaloidal poisoning is good only in so far as it relates to the amount of permanganate administered and the quantity of organic matter present in the stomach. It is extremely



improbable that potassium permanganate could be administered quickly enough and sufficiently concentrated to prove antidotal to any alkaloidal poison. Any delay in the administration of the salt would of course render the antidote worthless, since the toxic effect of morphine is obtained through absorption into the blood, and once there potassium permanganate or any other manganate is powerless to reach it.

With regard to its use as an antidote to the venom of rattlesnakes, it was pointed out by RICHARDS over twelve years ago (*Times and Gazette*, Jan., 1882), that if the potassium permanganate is introduced into the wound made by a venomous animal immediately on the infliction of the wound no toxic phenomena will arise, the effect being attributed to the oxidizing power of the permanganate salt. The investigations of the Smithsonian Institution showed its comparative uselessness under ordinary circumstances.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Hospital Deodorant.** B. P.—For deodorizing and disinfecting sick room "chambers," privies, etc., a solution made according to the following formula is used with very satisfactory results in a number of city institutions:

Copper sulphate.....	3 ii
Potassium bichromate.....	3 i
Terebene.....	3 iv
Solution corrosive sublimate.....	(1-2000)
Q. s. ad.....	Oii

Sig.: Hospital deodorant.

**Gowland's Lotion.** J. P. S.—The formula below is said to furnish a good imitation of this article:

Sweet almonds (blanched), 1 oz.; bitter almonds (do.),  $\frac{1}{4}$  oz.; of these make an emulsion with sufficient distilled water to make 10 fluid ounces; strain and to the strained fluid add slowly and with constant stirring 10 fluid ounces of distilled water in which has been previously dissolved 15 grains of mercuric chloride; after which further add enough distilled water to make the whole measure 20 ounces. The preparation is a little too strong in corrosive sublimate content to be a safe cosmetic and we should discountenance its use.

**Cyphilene.**—R. H. T. requests information as to the composition of the "remedies" of the Cook Remedy Co., of Chicago, and particularly of "Cyphilene," which it is stated is administered in pill form, and which sometimes causes salivation, but salivation of a different type from that caused by mercury.

We have never examined the Cook Remedies, but should judge from the description you give that chloride of gold and sodium figures to some extent in the composition of "Cyphilene." This can be determined with exactness by any analytical chemist.

**Removal of Warts.** C. A. N.—You are correct in stating that castor oil has been used with success in the removal of warts, but the operation is a tedious one. The removal of these excrescences can be accomplished best by the use of some such fluid as the following:

Trichloroacetic acid.....	9 parts
Alcohol.....	1 part

Salicylic acid { .....	5 parts
Lactic acid { .....	10 parts
Collodion { .....	10 parts

Apply twice daily with a brush.

**Exalgine and Salicylic Acid.** B. E. S.—These two chemicals should not be prescribed together in a solid form, as they react to form a soft paste which soon becomes liquid. The physician should be notified that the difficulty can be obviated by replacing the salicylic acid with sodium salicylate.

**Pill Excipients.**—In quoting A. Upham's formula for a general pill excipient, as published in a previous number of THE PHARMACEUTICAL RECORD, the Milan (Italy) *Bollettino Chimico Farmaceutico* brings the following modified formula as of value in massing pills containing resin, balsam or oils. It reads thus:

Gum acacia.....	2 parts
Gum tragacanth.....	1 part
Glucose.....	5 parts
Glycerin.....	75 parts

**Antiseptic Snuff Powder.**—Dr. Leonard A. Dessar, of New York, employs the following snuff with excellent results in acute and chronic rhinitis at his clinic on diseases of the nose and throat, at the Mt. Sinai Dispensary:

Menthol.....	10.0
Tannic acid.....	2.0
Boric acid.....	30.0
Bismuth subnitrate.....	20.0
Starch.....	50.0
Cocaine { .....	0.5
Aristol { .....	0.5

Make a fine powder.

**Hemorrhoids.**—Dr. J. C. Falk (*Medical Fortnightly*), finds that the following combination will usually relieve an ordinary attack of external piles:

Cocaine hydrochloratis.....	gr. vi
Morphine sulphatis.....	gr. vi
Extracti belladonnae.....	3 ss
Liquor plumbi subacet.....	3 ss
Ungt. acidi tannic.....	3 iii
Ungt. stramonii.....	3 v

Wash the part with water hot as can be borne for several minutes; dry, and apply the ointment freely. Repeat four times daily and after each stool.

**Quinine for Wounds.**—A 1 per cent. solution of quinine sulphate is considered by a certain foreign surgeon superior to mercuric chloride or iodoform for the treatment of infected wounds. Clean wounds, dressed with the same solution, are claimed to heal with astonishing rapidity.

## CORRESPONDENCE.

### "Your Journal the Best."

Inclosed please find check for one year's subscription.

I find your journal the best for its original and practical formulas, and I gain many valuable points by reading carefully your tips on advertising.

ALEX DE LREMAN.

NEWARK, N. J.

### A Practical View.

**Editor AMERICAN DRUGGIST:**

I notice in a late issue of your valued journal a call for a meeting of the Interstate Retail Druggists' League, to be held in New York on February 6. But for my deficient hearing I would attend this meeting.

I hope that they will adopt some plan that may lessen the cutting evil. I also hope that they can prevent patent medicine manufacturers from advancing the wholesale prices of their goods after the retail dealer has pushed them into sale, as so many have done recently for no good reason except to line their own pockets at the expense of the retailer.

The retail dealer cannot get any more; the jobber can. It is like the old stamp duty, which all came out of the retail dealer and was kept on for years after other merchants paid no revenue.

I see one U. S. Senator wants to see patent medicine taxed again. Another unjust tax we retail druggists pay is the U. S. revenue of \$25. We pay, and have been paying for years, as much as the largest saloon in New York city. Here we sell liquor only on prescription, and as our M. D.'s do not believe in it as a medicine much we sell but little, not enough profit to pay the tax. I sold in 1893 twenty gallons of cheap rye whisky, about two gallons of California brandy and a little wine. I dare not sell a pint of alcohol without a prescription, except for a few purposes.

One thing is certain, the retail dealers will not push the goods that have advanced beyond reason, but will push others in their place.

D. J. HUMPHREY.

NAPOLEON, OHIO.

### Another Plan.

**Editor AMERICAN DRUGGIST:**

I write to outline a plan to remedy the evils that afflict the retail drug business. Establish in New York a retail druggists' co-operative or combination store, with a few branch stores, if thought desirable, in the more important business centers throughout the United States. Issue 500,000 shares of stock at \$10 a share, and invite all the retail druggists to buy shares, but not to the exclusion of the wholesaler or jobber, who may buy shares also, only the business must be controlled by the retailers; and to secure this all voting as to the management shall be individual, and not according to the number of shares held by any individual, so that the smallest stockholder shall have as much voice in the conduct of affairs as the greatest.

All proprietors of medicines, etc., shall be invited to agree to sell exclusively to this concern. All purchases shall be for cash, and all goods shall be sold for cash to the retailer at a uniform profit of 10 per cent., whether the quantity purchased be a gross or only the twelfth of a dozen, so as to give the poor man as good a chance as the rich. The latter will have his advantage solely in dividends. The concern shall not retail at all—not even at full prices, as that would so far deprive the retailer of his legitimate business.

Sales shall be made to retail druggists only, and to those ONLY who sell at FULL prices.

This is a bare outline of the plan. An average of 17 shares to each druggist in the United States would more than secure the money. Of course every retailer must agree to buy of the concern. It need not injure the jobber, as arrangements could be made to buy his stock at the LOWEST price, such stock as was in salable condition. That would be all that had any value even to him.

I know of a trust—a banking trust—where all funds would be safe. But it is needless to go into details here.

THOS. SCOTT.

GARDEN CITY, LONG ISLAND.

# News and Notes.

## Random Notes of a Rambling Journey.—VI.

### TITUSVILLE AND THE INDIAN RIVER.

Titusville, the starting point for the attractive trip down the Indian River, is one of the most prosperous looking of the smaller towns on the east coast of Florida. Its proximity to the ocean contributes to a clear bracing atmosphere which renders the place eminently healthy as compared with some of the cities of the interior, where malaria is known to carry off many victims yearly. Prosaic as its name appears, the town is really interesting, boasting of two hotels and two drug stores. The former continue open during the Winter months only, while the latter are open for business the year round. Of the two pharmacies, the oldest established and leading one is that of John M. Dixon of saw palmetto fame. Mr. Dixon has been in business as a pharmacist for close on to twenty years and has a reputation second to none in Titusville for sterling honesty and probity of character. The news item which appeared in a former number of this journal to the effect that Mr. Dixon had only a limited amount of experience as a pharmacist was incorrect, though inserted upon the authority of a prominent Jacksonville pharmacist. He has been experimenting for nearly fifteen years with different preparations of the Saw Palmetto (*Serenoa Serrulata*), and in the South his name is intimately associated with the drug. He makes four preparations of Saw Palmetto, viz.: Fluid extract, oil, "powdered oil" (oleified powder), and syrup, and does a considerable export trade both in the ripe berries and the preparations referred to. He has a charmingly vivacious assistant in the person of Miss Carrie China, who is a welcome recent addition to the ranks of women pharmacists, and one from whom great things may be looked for if she persists in the line of study she is now pursuing.

Speaking of the saw palmetto, I am convinced, from observation, that the plant possesses many valuable properties and uses which only await development to be the means of starting a number of new industries in Florida. Thomas J. Murrey, who is a newspaper man of wide experience and a great authority on subjects gastronomical, was most favorably impressed with the condiment value of the palmetto berries, and it may not be long before our Congressmen and Senators will feel the vitalizing influence of the drug, as Mr. Murrey has supervision of the Congressional restaurant at Washington and is contemplating the production of a Palmetto *Mayonnaise* from the powdered fruit.

As a tanning agent saw palmetto promises to have a wide use. Its tannic acid content, which is said to average about 12 per cent. of the bark, is available at all seasons. Heretofore tanning has been almost exclusively a Northern industry, but the discovery of the palmetto for this purpose will doubtless have the effect of speedily developing the industry in the South.

The remaining member of the craft in Titusville and friendly rival to Mr. Dixon is J. B. Screven. He occupies a pharmacy of more modern design than Mr. Dixon, but business is somewhat evenly divided between them, the bulk if any going perhaps to the latter.

The trip from Titusville at the upper to Jupiter at the lower end of the Indian River is made on a steamer of the old stern-wheeler type as found on the Mississippi River, the boats being built in New York on nearly identical lines. The accommodation on board was good, the officers from captain down appearing to vie with each other in courteous attentions to passengers. What proved to be the most interesting part of the trip was the passage through the Narrows, where the total breadth of the river in some places does not exceed 100 feet, affording fine views of the curious arboreal forms and thickets of mangroves which line the river's banks. The water fairly teems with fish, and as night approaches becomes highly phosphorescent. Brilliant glimpses of large and small fish are caught as they dart away in all directions at the approach of the steamer. The vegetation becomes more tropical in the lower reaches of the river, and many rich groves of pineapples are to be seen on the high ground leading from the shore.

The end of the trip is reached at Jupiter (no drug store), from which point a short railroad runs to Lake Worth, eight miles to the south. The lake is twenty-two miles long and one-half to one mile wide and is much frequented by visitors from the North, many of whom occupy handsome cottages on its shores. Points on the lake are reached by small steamers from Juno, the terminus of the Jupiter and Lake Worth railroad. On the way down we had the good fortune to be joined by Garry B. Adams, of Brooklyn, a member of the firm of Adams & Sons, of Tutti-Frutti fame, who owns a very imposing villa residence on the lake shore. Mr. Adams was invaluable to us from his knowledge of the different points of interest. The finest cottages are located between the two miles of beach separating Lake Worth landing and Palm Beach.

Prominent among the Northerners having Winter residences here is Captain Clowe, of Chicago. In his company Mr. Elliott and myself paid a visit to Palm Beach and the mammoth Hotel Royal Ponciana, erected recently by H. M. Flagler, the Standard Oil magnate. The workmen engaged in the construction of the building form a little colony, and their temporary homes of tents, shanties and other hastily built structures present a picture much like what a mining camp must have looked in the '40s. As might be expected in a community composed of workmen of all sorts and conditions and grades of skill and character, there is considerable disregard of law and order, and fights between the rough characters composing it are a matter of frequent occurrence, scarcely a day passing without some kind of disturbance happening, in which revolvers and knives are used freely. The people on the lake call the collection of huts and tents Midway Plaisance, and one avenue of a peculiarly somber hue of toughness has been named The Bowery. One tent-like shanty which my guide alluded to as the Hoffman House measures about ten feet by fifteen feet, and is fitted up as a bar-room, the proprietor displaying his liquor license on the same shelf with his revolver, both being equally conspicuous. As a Florida liquor license costs \$700 per annum, this speaks for the amount of business transacted.

THOMAS J. KEENAN.

We regret to have to record the death of Sidney A. Schieffelin, who passed away at his home in Geneva Sunday, January 21, at the ripe age of 71 years.

## Gotham Gossip.

There is no more popular and instructive course in the curriculum of the New York College of Pharmacy than that of Professor Elliott's, in which chemistry, is taught. While an unobserved observer last Tuesday while Dr. Elliott lectured on the production of gases and elucidated the construction of generators, bent tubes, etc., it occurred to me that he must be a dull boy indeed who fails to become enamored of the study as pursued in the chemical laboratory over which Dr. Elliott so ably presides; and this feeling became the more firmly rooted as I scanned the bright faces of the 80 or more students who composed that afternoon's section. To say that I was interested but poorly expresses the fascinated attention which I gave with them to Dr. Elliott's clear and brilliant examples of the numerous simple effects in chemical combination which he produced. Performed or explained by another teacher, the examples would no doubt appear very commonplace, but Dr. Elliott has the happy faculty of infusing life into very dry subjects, and as chemistry lends itself to brilliant effects the result can be imagined. The lecture carried me back to my own student days, when the study of chemistry was pursued under greater difficulties than is the case now with the newer appliances and methods of the schools. As chemists the graduates of the N. Y. C. P. are unexcelled, which is not surprising in view of the character of the tuition. The lectures are given in a hall of unusually large dimensions (for a chemical lecture hall), down which extend a series of double benches facing a rostrum in plain view of every student. On this rostrum, with a working bench in front of him, Dr. Elliott illustrates every step in any important chemical problem, and each student is required to work out the example and produce the same result as that obtained by his teacher. While held in most affectionate esteem by every one of his students, there is a quiet dignity of bearing about Dr. Elliott which appears to command unswerving obedience and respect, and makes his personality a very charming one, indeed.

What busy men these hospital apothecaries are! Their work is conducted on different lines from that of the retail pharmacist of the stores and certainly lacks the variety of the latter, but this is compensated for by a greater freedom in working methods. As many as 250 prescriptions are dispensed daily in the drug department of the New York Polyclinic hospital and dispensary, and a large proportion of this number are paid for at the rate of 10 cents each prescription. The apothecary in charge is Robt. A. Lee, and he is ably assisted by H. K. Kelly. Mr. Lee has a liking for analytical chemistry and has done some clever research work in studying the composition of various waters. The other evening I found him experimenting with trikresol, a new antiseptic of the carbolic acid order, which he gave me to understand was three times stronger in antiseptic and disinfectant power than carbolic acid, but not quite so soluble. It is a water white, clear liquor of pleasant, creasote-like odor, and but faintly reminiscent of carbolic acid.

C. H. Sagar, formerly of Auburn, N. Y., and now of Duluth, Minn., where he is head of a prosperous firm of wholesale druggists doing business under the name Sagar Drug Co., was a visitor to the New York drug market last week.

Van Horn & Ellison, the well-known pharmacists of Park avenue, this city, at the request of District Attorney Nicoll, analyzed the contents of eighty-four vials in the Dr. Meyer murder case, testing for antimony and arsenic, and charged \$1,680 for their work. Comptroller Fitch thought the bill excessive, and asked for an opinion from Dr. Charles Rice, chemist to the Department of Public Charities and Corrections. Dr. Rice reported that \$840 would have been a fair charge, and the matter is yet in abeyance.

The New York *Commercial Advertiser* has the following to say about George J. Seabury in a recent issue:

One of the most accomplished Republicans in local politics is George J. Seabury. He not only speaks several languages, but he has made inventions of surgical instruments that have demonstrated his scientific inclinations. A pharmacist of high standing, his versatility and originality have enabled him to succeed in life. He wears glasses, and never sees spots on the sun or big political majorities for the Republicans in this city. His mustache has an aggressive curve, and he is considered one of the most energetic political workers in the city and county.

A transformation is in progress at 20 College place, and when the carpenters and fitters have finished their work, C. G. Bacon & Co. will have one of the handsomest, most commodious and convenient establishments to be found among the wholesale and manufacturing drug trade of this city. This transformation and the push and vigor displayed by the firm are a testimony to the activity, energy and sagacity of the active managing partner, C. Graham Bacon, Jr.

The success of the annual ball of the German American Apothecaries' Society on Friday night, January 19, both as to social features and as to numbers, was unusually great. Their balls have been so uniformly enjoyable of late years that they have attracted to them a number of the younger members of the pharmaceutical profession of the city, thus assuring the continuance of their past popularity.

Among the most active of the committee of arrangements of the great German Charity Ball to take place soon is Robert F. Amend, of Eimer & Amend. Mr. Amend's activity in the work of charity is already bearing good fruit, so far as the sale of tickets is concerned.

Among the visitors to the New York drug market last week was Harry Gilpin, of Gilpin, Langdon & Co., Baltimore.

A. B. Evans, of the widely-known house of Evans, Sons & Co., Montreal, was in the city during the past week.

### Boston Budget.

In what was once a fashionable quarter of Boston there was a drug store that was closed up one night by the proprietor and remained closed for years. The dust settled upon the bottles and shelving, the mold formed on drugs and sundries, young children gaped open-eyed into the dust begrimed windows in daylight and hurried frightened by after night fall. Why the store was closed no one in the neighborhood knew. A similar case occurred in Cincinnati and is brought to mind by the recent death of the owner, Dr. David Wilson, at the age of 80. Dr. Wilson did a prosperous drug business until he closed up his store and kept it locked for twelve years, saying that the devil had instructed him not to open. He had lived by himself for the past twelve years on one of his farms west of Robinson, Ill., which he claimed belonged to Christ. Robbers raided his house a few months ago. He was 80 years old and at

one time one of the best physicians in Ohio, but became deranged. It is said he was worth \$180,000.

In a Massachusetts town there was a crank who kept a drug store. For years it was not swept or dusted, and the accumulation of dirt was ignored by the proprietor, whether it was by the patrons of the store or not. It was his custom on opening a box of bottles to put them up on the shelves, sawdust clinging to them where it would and neither the bottles nor the shelves or show cases where they were put were ever dusted or cleaned off. Once a lady came into the store and asked for some article of merchandise. The proprietor said, "Yes, I've got it, but it's in that box that I haven't opened yet. You'd better go across to So and So's to get it. It's too much trouble to open the box now." When asked by a by-stander how long he had had the box unopened in his store, he said, "Oh, two or three weeks, I guess." Notwithstanding his eccentricities he made money (probably because he was in the drug business) and when his son grew up the father set him up in a nice little business in the same village. The boy did not succeed and after a while "failed up," and the father took the goods and instead of offering to sell them as he might well have done in connection with his regular trade he put them away in the store attic and they would have rotted there had not the block been destroyed by fire. Are as many cranks developed in other lines as there are in the drug business?

### The Interstate Retail Druggists' League.

The condition of the weather on Monday evening was not favorable to a large attendance at the "preliminary meeting" of the Interstate League, but the number present gave evidence that the druggists of New York are not to be deterred by the elements from attesting their adherence to League principles or their faith as to the ultimate success of the local branch.

When President Osmun took the chair at 9.45 P.M. there were in all about sixteen members to respond to a roll call, the number being added to as the night wore on. On motion of Luther F. Stevens the calling of the roll of members was dispensed with, and the meeting opened with a short address by Mr. Osmun. His well considered and interesting remarks on the things necessary for success in the present movement were well received. He ended by urging upon every one present the duty of making individual efforts for the success of the special convention which is to be held at Terrace Garden, 147 East 58th street, on Tuesday, February 6, at 10 A.M. He then presented a resolution prepared by V. Kostka, the executive officer for New York State, which commenced with an expression of confidence in the "Detroit plan" and a promise to work for its successful operation. It was represented, however, that the plan mentioned would not fulfil all the conditions of success until its provisions were adopted by at least 80 per cent. of the druggists of the United States. He therefore proposed an amendment to the plan which would provide for suitable legislation looking to the much needed "regulation of prices." He therefore suggested the following changes in the platform of the Interstate Retail Druggists' League.

The Interstate League to be divided into three branches: (1) A county branch; (2) State branch, and (3) the Interstate League.

The county branch should take care of the coun-

ty offices, introduce the Detroit plan and enforce it; elect its own officers, to include a legislative committee of three for every assembly district and one delegate for every 50 members or fraction thereof (to the State convention), the delegates of the different counties to form a State branch.

The State branch, composed of members from the different counties, should meet once a year in the early part of Summer to discuss the different laws bearing on pharmacy, and resolve which to favor and which to oppose.

The different legislative committees should make it their duty to interview the different nominees for Assembly and Senate and endeavor to secure their promises to aid in correcting abuses and repealing obnoxious laws. It should then be the duty of every member to vote and work for candidates who promise such aid, regardless of what party he may belong to.

The State branch to elect its officers yearly as usual, also an executive officer for the State.

The executive officers of all the States to form the Interstate Retail Druggists' League.

A general meeting of the League to be held once a year.

It should be the duty of the League to introduce measures in the State Legislatures compelling manufacturers to print on the labels attached to all containers a formula of their contents.

All communications on League affairs should be addressed to the president of the Interstate Retail Druggists' League; communications from the president to county branches should be addressed to the general secretary, who will inform the State secretary, and he in turn will address the county secretary.

As soon as 80 per cent. of the druggists of a city sign an agreement to adopt the Detroit plan it should be the duty of the county branch to prepare a price list and communicate the result to the president, who should then notify the manufacturers, wholesalers and other county branches of the scale agreed upon. After such notification any manufacturer or dealer who supplies cutters with goods should be placed on the "black list" and their names forwarded to every member of the League. It should then be the duty of every member to refuse to have any further dealings with manufacturers or dealers thus black-listed.

Provided, however, that such manufacturer or dealer be reinstated on payment of a fine of —.

Retailers who supply cutters with goods should also be placed on the "black list," as also wholesalers guilty of supplying offending retailers.

Retailers to be reinstated on payment of a fine of — for the first offence, and an additional sum of — for each succeeding offence.

As the League is a business organization its officers should receive payment for services rendered. The secretary of a county branch should receive 10 cents per year from every member; State secretaries \$1 per year from every county branch, and the general secretary \$2 a year from every State branch. The executive officers, whose duties should consist of organizing the different counties, should receive \$1 for every new member, to cover cost of canvassing and other expenses—50 cents of this sum to be paid from the general funds of the League and 50 cents by the county branch.

The annual dues should remain at \$2, but be distributed as follows: \$1 to the general fund of the national body, and \$1 to the county branch. Counties already organized and wishing to become affiliated with the national body should be able to do so by contributing one dollar for every member.

After the organization is completed 50 cents should be reserved for the League fund, 50 cents for the county branch, and \$1 for the State executive. All moneys remaining over after payment of necessary expenses should be used for maintaining a lobbyist in the State assembly.

The reading of the resolution received an attentive hearing, and at its close Luther F. Stevens, secretary of the Brooklyn branch, took the floor. He said he strongly approved of Mr. Kostka's resolution, and in a few well chosen words drew a glowing picture of the success which must attend well directed and well disciplined efforts toward the suppression of the evil of cutting. "The trouble with New York druggists," he said, "as indeed with the majority of druggists all over the country, is that each man thinks himself alone competent to adjust the difficulty, and is always desirous to have his own pet plan set in motion, the result being that we work as a rabble—as a mob—instead of as a well drilled and disciplined body." He instanced the success achieved by the druggists of Chicago in breaking up a notorious firm of cutters, who were supposed to have unlimited means at their command. In closing he expressed the pleasure it afforded him to move the adoption of Mr. Kostka's resolution and hoped his listeners would spare no effort to bring about a

large attendance at the special convention next Tuesday. The applause which followed the conclusion of Mr. Stevens' address was some time in subsiding and indicated the favor with which it was received. His motion was duly seconded, and the resolution was adopted by a unanimous vote.

The election of delegates to the special convention was then taken up and resulted in the nomination of M. F. Bender and Chas. A. Osmun, who were declared elected in due form.

Several new members were elected at this meeting, among the number being Charles Wylie of 936 Sixth avenue, C. F. Mayer of 755 Ninth avenue, W. H. McNair of 226 Ninth avenue, and R. Eschmann.

### Boston Druggists Dine.

The annual meeting and banquet of the Boston Druggists was held at Young's hotel, Boston, on Tuesday, January 28. At the business meeting which preceded the banquet the following officers were elected: President, James F. Babcock; treasurer, Thomas L. Jenks; secretary, James O. Jordan; executive committee, Harvey S. Sears, Charles A. Kilham, William A. Chapin, George W. Cobb, Freeman H. Butler, Charles F. Cutler, Alfred H. Bartlett; membership committee, Reuben L. Richardson, George H. Ingraham, Josiah Bryant, William W. Bartlett, Fred L. Carter.

When the business meeting adjourned an informal reception was held, in which Governor Greenhalge and the other guests present were introduced to the members, after which the party proceeded to the banquet hall.

Mr. Frank A. Davidson, Ph. G., of the Theodore Metcalf Co., the retiring president of the association, presided, and the guests of the association were Gov. F. T. Greenhalge, Henry A. Thomas, B. T. Fairchild, president of the New York College of Pharmacy; M. N. Kline, of Philadelphia; Prof. E. L. Patch, president of the American Pharmaceutical Association; Prof. James F. Babcock, W. F. Sawyer, president of the Massachusetts College of Pharmacy; D. O. Haynes, of the *Pharmaceutical Era*, Detroit; C. A. Mayo, editor of *THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, New York; E. O. Stanley, of New York, and J. Allen Rice, president of the Massachusetts State Pharmaceutical Association.

Among other present were:

Theodore Metcalf, Joseph Burnett, Prof. G. F. H. Markoe, N. J. Rust, J. S. Orne, A. K. Tilden, Thomas Doliber, Dr. T. L. Jenks, C. A. West, S. A. Sheppard, G. M. Garland, M.D.; Heber Bishop, M.D.; J. A. Rice, F. H. Butler, Thomas Hollis, Francis Hollis, L. B. Hollis, Charles H. Cole, O. G. Rankine, F. L. Carter, I. B. Patten, F. B. Patten, S. A. Fowle, H. S. Fowle, M. L. H. Leavitt, E. Peabody Gerry, M.D.; C. F. Moulton, M.D.; J. F. Sweeney, E. I. Baker, Henry Manly, G. T. Brown, F. C. Montgomery, M. F. Lyons, A. H. Luker, John Moir, Henry Canning, W. W. Bartlett, H. M. Whitney, S. H. Carragan, B. Jenney, Jr.; G. H. Ingraham, E. H. La Pierre, G. E. Norton, E. P. Bryant, E. W. Shedd, T. H. Farmer, E. W. Lewis, J. O. Jordan, J. J. Noble, F. W. Shackley, C. A. Clough, D. A. O'Gorman, G. F. Kellogg, Josiah Bryant, W. W. Bartlett, R. Crowell, H. S. Sears, E. F. Billings, W. A. Chapin, H. P. Whitmarsh, J. F. Neill, L. L. Jenkins, G. B. Markoe, A. H. Bartlett, C. B. Hazeltine, F. A. Wilson, C. W. Cheney, J. W. Cox, B. W. Johnson, C. H. Carter, William A. Morse, Mr. Fox, E. O. Stanley,

F. T. Neeley, W. V. Alexander, S. A. Neill, R. L. Richardson, A. R. Clapp, H. J. Vargas, G. W. Cobb, Chas. Coleman.

The menu and the menu cards were elegantly gotten up, and their gastronomic and intellectual merit reflect particular credit upon the chairman of the dinner committee, Thos. Doliber, showing that he is great as a purveyor of food, whether for infants or for adults.

### MENU.

"A dinner lubricates business."  
*Cotuit Oysters.*  
"Music is well said to be the speech of angels."  
*Consommé à la Dauphine.* *Green Turtle.*  
"Turtle makes all men equal."  
"Laughter is the chorus of conversation."  
*Saddle of Venison, Jelly Sauce.*  
*Roast Philadelphia Chicken.*  
*Fillet of Beef aux Champignons.*  
"Simple diet is best."  
*Cromesqui of Lobster, Cardinal.*  
*Cutlets of Chickens with Peas.*  
*Vol au Vent Safricon.*  
*Banana Fritters, Glacé Cognac.*  
*Timbales of Spaghetti, Italienne.*  
"Appetite comes with eating."  
"Joy is the best of wine."  
*Lobster Salad.* *Chicken Salad.*  
"Be merry if you are wise."  
*Black Duck.* *Mallard Duck.* *Larded Grouse.*  
"Music makes a glad remembrance of our youth, calls back past joys, and warms us into transport."  
*Charlotte Russe, Frozen Pudding.*  
*Lemon Meringues, Madeira Wine Jelly.*  
"Enjoy your present pleasures so as not to injure those that are to follow."  
*Oranges, Bananas, Apples, Nuts, Raisins, Figs, Ice Cream, Sherbet, Cheese, Olives, Coffee.*  
"The charm of music dwells not in the tones, but in the echo of our own hearts."

Governor Greenhalge made a stirring and timely address in response to the toast "The Commonwealth of Massachusetts," in which he adjured his hearers to continue their struggle for the purification of the ranks of pharmacy, making the name of pharmacy what it should be—a title of honor and respect. The other toasts and speakers were: "The Press," E. J. Carpenter, *Boston Advertiser and Record*; "The National Wholesale Druggists' Association," M. N. Kline, of Philadelphia; "The American Pharmaceutical Association," President E. L. Patch, of Boston; "The New York College of Pharmacy," Benjamin T. Fairchild, of New York; "The Massachusetts College of Pharmacy," President Wm. F. Sawyer, of Boston; "The Pharmaceutical Press," Caswell A. Mayo, editor of *THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, New York, and D. O. Haynes, of the *Pharmaceutical Era* of Detroit; "The Proprietors' and Manufacturers' Association," Edward O. Stanley, of New York, and "The Incoming President," Prof. James F. Babcock.

Frank T. Neely, of Chicago, gave a charmingly rendered whistling solo, and throughout the evening a boy chorus assisted by a male quartet rendered some excellent music.

The affair proved altogether a most charming one, both members and guests expressing themselves as delighted.

### Philadelphia Drug Exchange.

The Philadelphia Drug Exchange held its annual meeting last week and entered a protest against too frequent tariff tinkering. In his annual report (the thirty-third report of the organization) L. Hassel Lapp expressed the opinion that "nothing more deranges finances, nothing more shakes confidence than alterations being

permissible in this respect. A changeable legislation disconcerts the best planned enterprises and baffles all business ventures."

A readjustment of the rate of duty on alcohol is favored. With an internal revenue tax of ninety per cent. per proof gallon the customs duty should be about \$1 instead of \$2.50. The exchange also favored a reduction of the whisky tax. Other suggestions are made in reference to alcoholic spirits.

The business depression of 1893 is referred to. "While it is admittedly," says the report, "the most disastrous year we have ever seen, yet our own trade has not felt the severity of the storm as some others. This desirable exemption is no doubt due to the conservative methods of business that prevail in the drug and allied trades."

The election of officers for the ensuing year resulted as follows: President, William J. Miller; vice-president, Chas. E. Hires; treasurer, Edward H. Hance; secretary, William Gulager; directors, L. H. Lapp, A. H. Jones, H. A. Rosengarten, M. N. Kline, Dr. A. W. Miller, Dr. R. V. Mattison, H. N. Rittenhouse, John Ferguson.

### Association Notes.

**THE FOND DU LAC PHARMACEUTICAL ASSOCIATION** has been reorganized and the following officers elected: President, J. C. Huber; secretary, Anton Pfel; treasurer, T. M. Givens.

**ONTARIO ASSOCIATION.**—The second annual meeting of the Provincial Pharmaceutical Association will be held at the College of Pharmacy, Toronto, on Thursday and Friday, February 8 and 9. Two addresses of interest are promised, one by Mr. R. S. Muir, on "New Avenues of Trade," and the other by Mr. Henry Waters, of Ottawa, on "The Preparation of Pharmaceutical Elixirs."

**CONNECTICUT PHARMACEUTICAL ASSOCIATION.**—The eighteenth annual meeting of this association will be held in the new Y. M. C. A. building, Hartford, February 6 and 7. The first session will be called to order at 7.30 o'clock, Tuesday evening, after which will be the annual banquet. It is understood that Prof. E. L. Patch, president of the American Pharmaceutical Association, will be present, as also Henry Canning, president of the Inter-State Retail Druggists' League, and it will be to the interest of the members to hear what these gentlemen have to say. Mr. Canning will speak upon the importance of organizing locally and maintaining living prices, under the Detroit plan. This meeting should be largely attended. The local secretary, Frederic Wilcox, will issue full particulars of the arrangements made for entertainment.

**DEUTSCH-AMERIKANISCHE APOTHEKER VEREIN.**—The annual ball of this association was held at the Teutonia Assembly Rooms in this city on Friday evening, January 19. As is usual with affairs of this kind the ball opened rather late, many pharmacists preferring to come after closing up their stores for the evening. The decorations of the hall were elaborate and tasteful, the music good, and those in attendance and the number was large, were in excellent spirits, making the evening most enjoyable socially. At the supper, which was presided over by the president of the society, Victor Kostka, Geo. Hoffmann responded to the toast "The Ladies." The president himself responded to "Our Guests," and among the other toasts was one to "The Chef," from Mr. Pfaff in token of the excellence of the



repast. To Albert C. Behrens as chairman of the committee of arrangements much of the credit for the success of the affair. Martin Arnemann also distinguished himself as a most able floor manager.

### Pharmacy Boards.

**NEBRASKA BOARD.**—The following have passed the examination before the pharmacy commission and certificates have been issued to them: L. A. Cushman, Sanborn; C. O. Tool, Estherville; I. N. Wickham, Oskaloosa; E. C. Will, Marshalltown; S. H. Bell, Van Horne; C. M. Drummond, Mount Pleasant, and Edward Buckner, Bellevue.

**ST. LOUIS COLLEGE OF PHARMACY.**—The annual ball of the Alumni Association of the college took place on Saturday, January 21, at Liederkranz Hall. An excellent programme of music was rendered by Seanger's orchestra, and a toothsome supper was one of the enjoyable features. Prominent on the different committees were: Prof. O. A. Wall, Dr. Chas. O. Curtman, Dr. J. C. Falk, Francis Hunne, Dr. H. L. Goodman and O. F. Heitmeyer.

**NEW HAMPSHIRE BOARD.**—The examination conducted by the New Hampshire board of pharmacy was concluded on January 25. Seventeen candidates had been examined, and seven of them passed. Their names are as follows: Registered pharmacists—John C. Parker of Farmington, Edgar S. Woodard of Lancaster, Charles S. Perry of Hillsborough Bridge, James J. Kerwin of Manchester. Assistant registered pharmacists—Patrick H. Brown of Lowell, Albert W. Vittum of Dover, William F. Plummer of Dover.

### A Card from W. H. Schieffelin & Co.

The trade will probably remember the numerous circulars issued by Chemische Fabrik Auf Actien, vormals E. Schering, and Lehn & Fink, concerning our alleged violation of the rights of these parties to the exclusive use of the alleged trademark "Piperazine."

Suit was commenced against us in or about February, 1893, under this trademark, to which we filed our answer in April, 1893, when the same was due, and in December last the complaint was dismissed, upon our application, by his honor Judge Lacombe.

We had, during this period, been pressing the complainant to proceed with the case, because we had absolute proof that their case was worthless, but finally, failing in any way to bring them to trial, we obtained the order of dismissal as above stated.

By the dismissal of this suit the attacks upon us are practically admitted to be unjustifiable.

We have just been informed by our manufacturers in Germany that the litigation brought against them there under the Piperazine patent by Messrs. Schering has been unsuccessful, and it has been declared by the court there that the Farbenfabriken vormals Friedr. Bayer & Co., of Elberfeld, are not liable under Schering's patent. It is naturally to be expected that the same result would be reached by the courts in the United States should any case arise here.

It is our intention, in the future as in the past, to act only within our legal rights, and infringe no valid patents or trademarks; but, at the same time, when such unwarranted attacks are made upon us as has been the case in this Piperazine matter, we have deemed it our duty to

keep the trade informed concerning the situation, and to protect their interests in every proper way against unwarranted interference.

W. H. SCHIEFFELIN & Co.  
January, 1894.

### Trade Notes.

Have you heard about the Scates plan to prevent cutting on proprietary goods? If not write at once for particulars to the Scates Medicine Co., Westbrook, Me., mentioning this journal.

Dr. A. P. Hoxsie, proprietor of the popular preparations Hoxsie's Certain Croup Cure and Hoxsie's Disks, offers an unusual opportunity to any one who wants to enter this line of business. Further particulars may be obtained by addressing Dr. A. P. Hoxsie, Buffalo, N. Y., and mentioning this journal.

No handsomer packages could be found than handsome bottles capped with the fine foil caps of Lehmaier, Schwartz & Co., of 83 to 87 Bleecker street, New York City. This firm have an immense plant fitted with all the very latest appliances, and turn out a remarkably handsome line of foil caps either plain, embossed or colored. Write them for free samples, mentioning this journal.

The Tyer Rubber Co., Andover, Mass., are introducing the "Tyrian" Sanitary Cover as illustrated herewith. The covers are air-tight and designed for use in covering "vessels" in sleeping rooms and



TYRIAN SANITARY COVERS.

places where danger to health may be apprehended from the escape of effluvia.

The smaller sizes are designed to cover tumblers or bowls containing medicine, ice water or food of any kind. The covers are made of smooth pliable rubber drawn over a wire rim.

Suspensory bandages are dear if not bought in the right way. There is money in handling those which are bought right. The Ware Mfg. Co., Camden, N. J., can give some points on this in their catalogue, which will be mailed free to any of our readers who mention this journal when writing them.

Division of labor brings greater perfection in the product and lessens the cost of production. This is the basis upon which Charles R. Doane, of 22 Meserole street, Brooklyn, asks the drug trade to try his seidlitz powders. By using absolutely pure ingredients, mixing with the greatest thoroughness and dividing with scientific accuracy, the best possible results are assured, doing all this by machinery and purchasing the ingredients in the largest way. Mr. Doane is enabled to sell the powders already put up at a very low rate. Write him for quotations, etc., mentioning this journal.

Half a dozen of Raymond's pectoral plasters means \$1.50. Half a dozen of them will be sent free to any of our readers who will send Raymond & Co. the names of one hundred heads of families in their own town. It means in reality a great deal more than \$1.50, for each one of these people will be written to about Raymond's plasters and you will probably sell half a gross before Spring, particularly if whooping cough happens to invade your neighborhood. When writing please mention this journal. The offer, by the way, does not apply in towns with more than fifty drug stores in them. Address Raymond & Co., 62 Carroll street, Brooklyn.

The handsome style of package adopted for the perfumes of Ed. Pinaud, together with the exquisite odor of the perfumes themselves, is what has served to make these goods so popular with high-class customers. Pharmacists who aim to keep the best cannot afford to be without a list of the more popular odors, and as a postal card addressed to Ed. Pinaud's Importation Office at 42 East 14th street, New York, will bring a price list and free samples, the hint should be at once acted upon.

Walter F. Ware, the well-known owner of the "Mizpah" line of specialties, has been compelled, owing to the rapid increase in the demand for his goods, to remove from his old stand, 70 North Third street, to the very much larger establishment at 512 Arch street. Mr. Ware has lately bought a very large interest in the business of the Elma Confectionery Co., and has been elected treasurer and general manager. The Elma Co. manufacturing an exclusive line of druggists' candies such as lime tablets, cough drops, etc. The business is carried on at 512 Arch street, Philadelphia, and Mr. Ware bespeaks for this concern the same kind support that has been his in his old line from his many friends, assuring them that his efforts will be unceasing to make the goods turned out warrant their patronage.

### Review of the Wholesale Market.

NEW YORK, January 31, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the whole sale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The various jobbing houses report a satisfactory increase in the number of orders received from interior points during the past week, and the aggregate volume of trade is considered fully up to if not in excess of the corresponding period of previous years. The proposed change in the duty on opium, to which reference is made in another column, has favored speculation in the drug, and prices have been materially advanced. Quinine also shows an improvement, but outside of these lines there is nothing doing in quantities. Prices are fairly well sustained upon most lines.

#### DRUGS.

ALCOHOL continues held at \$2 24 @ \$2.28 with the usual rebate. The demand is moderately active.

ARNICA FLOWERS are in fair jobbing demand at the quoted range.

BALSAMS of all kinds are momentarily quiet, the recent arrivals having found early purchasers. Tolu continues to offer from second hands at 25c. @ 27c. Stock in importers hands is about exhausted.



**BARKS.**—Cascara sagrada has been active during the week, and among the large transactions we note sales of 5,000 lbs at  $5\frac{1}{2}$  @ 6c. Soap is easier at  $3\frac{1}{2}$  @  $4\frac{1}{2}$ c.

**BUCHU LEAVES**, short, continue in fair request with numerous small sales within the range of 12 @ 13c.

**CANTHARIDES**, Russian, are held with increased firmness, though not quotably higher. We quote 70 @ 75c.

**CASSIA BUDS** continue held and selling in a moderate way at 18 @  $18\frac{1}{2}$ c.

**CHAMOMILE FLOWERS**, German, are in fair demand, and we hear of numerous quantity sales at 19c. for fair quality.

**COD LIVER OIL**, Norwegian, is meeting with good seasonable demand, and we are reported sales of 25 bbls. at  $\$19.25$  @  $\$19.50$ .

**COCA LEAVES** are improving in demand, though no sales of any consequence are reported. Prime Truxillo are held with increasing strength, and already limits are considerably above buyers' ideas. In instances 18 @ 20c. is required for best goods of the above variety.

**COCAINE** is expected to advance materially soon. The price abroad has gone up about 20 per cent. and a figure to correspond is shortly expected here. Foreign markets, London and Hamburg, have been about cleared of the raw material, both leaves and the crude article, the purchases having been made for manufacturers account. The quotation for cocaine in this market is  $\$4.70$  @  $\$4.75$  for lots of 100 oz. though no considerable quantities could be secured upon these terms.

**COCOA BUTTER** is quite actively inquired for with sales reported of 10,000 lbs. at  $32\frac{1}{2}$  @ 33c.

**CODEINE** is firmer though not quotably higher. Purchases can yet be made at  $\$4$  @  $\$4.15$  in bulk, though an early advance is predicted.

**CUBEB BERRIES** are dull and the tendency of the market is easy. Prime S&S are now quoted 18 @ 20c. and ordinary 14 @ 16c.

**CUTTLEBONE**, Trieste, is meeting with more inquiry, with sales reported of 15 straps at full 11c.

**ERGOT**, German, is obtainable upon spot at 24c., but the lowest quotation cabled from Hamburg is the equivalent of  $24\frac{1}{2}$ c. laid down. The latter price, however, is for new goods. Bids of 24c. have been submitted abroad and declined.

**GLYCERIN** continues in fair jobbing demand without, however, any quotable change in price.

**JABORANDI LEAVES** meet with no particular attention at the moment; the recent importations are held at 25c., but the samples of the goods shown are not of a very desirable character and business is therefore held in check.

**MORPHINE** is in strong position with a firm upward tendency indicated.

**OPIMUM** has advanced steadily during the week, the article having undergone a marked appreciation with the information that a duty of  $\$1$  per lb. was suggested in Congress and inserted in the Wilson Tariff bill. A fair quotation of the market may be regarded as  $\$2.70$  @  $\$2.75$  in cases, though it is intimated in some quarters that possibly a trifle less could be done, the liberal advance in this market of late affording holders now a good margin of profit upon earlier purchases. No further improvement is cabled in the position of affairs at primary sources, and as supplies can yet be obtained there at some 10 or 15c. per pound below the quotations of this market, naturally large buyers are inclined to greater caution when considering further operations. Single cases are held as above, and occasional sales are re-

ported made at the range. For jobbing quantities there is a steady market, with sales at  $\$2.70$  @  $\$2.75$ . Powdered may yet be obtained at  $\$3.20$  @  $\$3.25$ , though the greater portion of the stock is held at higher figures.

**QUININE** has sold quite freely from the hands of jobbers during the week, the business being prompted by the prospect of an early advance by manufacturers. Foreign brands are quoted at the range of 22 @  $22\frac{1}{2}$ c. as to make, but the inside price is now the exception, and offers of quantities are made with a show of reserve. For B&S  $22\frac{1}{2}$ c. is the lowest value quoted in the market while some, in the trade decline to entertain orders at anything below the point of makers.

**SENNA** is passing out quite actively in small quantities at 18 @ 25c. for Alexandria and 6 @ 18c. for Tinnivelly as to quantity.

**TONKA** and **VANILLA BEANS** are without important change; both are maintained in strong position.

#### DYESTUFFS.

**CUTCH** has advanced in the interval and is now in strong position and active for prompt and forward delivery. Holders require  $5\frac{1}{2}$  @ 6c. for best quality SM and  $5\frac{1}{4}$  @  $5\frac{1}{2}$ c. for HT.

**GAMBIER** is well sustained at the recent advance, holders quoting spot goods 4.30 @  $4\frac{1}{2}$ c. and reporting sales to a moderate extent to both consumers and the trade at this range. London goods are not offered below  $4\frac{1}{2}$ c. and direct shipments from Singapore per steamer are held at a similar value.

**MADDER**, Dutch, is quiet, No. 1 in casks may be obtained at 10c.

**NUTGALLS**, blue Aleppo, continue held at  $13\frac{1}{2}$  @  $14\frac{1}{2}$ c. The cost to import is said to be fully 14c.

**SUMAC**, Sicily, is in moderate request and steady at  $\$72.50$  @  $\$80$  as to brand and quantity.

#### CHEMICALS.

**ACETATE OF LIME** remains quiet at nominally unchanged prices.

**ARSENIC**, white, is inquired for, but the available stock is yet small and importers are not offering below  $3\frac{1}{2}$ c. For Garland's up to  $3\frac{1}{2}$ c. is asked.

**BLEACHING POWDER** is selling in a moderate way at  $2\frac{1}{2}$ c. for German and  $2\frac{1}{4}$ c. for English.

**BLUE VITRIOL** continues held at  $3\frac{1}{2}$  @  $3\frac{1}{4}$ c. though the interest extended is rather limited at the moment.

**CARBOLIC ACID** continues dull with the quotations of the market somewhat nominal.

**CHLORATE OF POTASH** is dull but firm at  $14\frac{1}{2}$ c. for German crystals and  $14\frac{1}{4}$ c. for English.

**CITRIC ACID** continues very dull. Manufacturers' prices are being shaded from second hands about one-half cent.

**CREAM TARTAR** and **Tartaric Acid** are dull with prices somewhat unsettled. The former is obtainable in crystals and powder at  $17\frac{1}{2}$ c. The latter is held at 22 @  $22\frac{1}{2}$ c. for crystals and powdered.

**QUICKSILVER** is without important change; jobbing sales are making at the range of 45 @ 46c.

**NITRATE OF SODA** is firmly held, and moderate sales are reported at the range of  $\$1.95$  @  $\$2$ .

**SAL SODA**.—Domestic may now be obtained at 80 @ 85c. f. o. b., less the usual discount. Sales of English are making at 90 @ 95c.

#### ESSENTIAL OILS.

**ANISE** continues slow of sale, but importers do not urge their goods below  $\$1.45$ .

**BERGAMOT** remains quiet and the market appears easy in tone within the range of prices quoted at  $\$1.75$  @  $\$2.40$ .

**CASSIA** is in moderate jobbing request and firm at  $82\frac{1}{2}$  @ 85c.

**CLOVE** is decidedly easy with goods obtainable at 50 @ 53c.

**CUBEB** has declined to  $\$1.50$  @  $\$1.70$  as to holder. The market is a little unsettled.

**PENNYROYAL** is easier with sellers at 90c. @  $\$1$ . The demand, however, is limited.

**PEPPERMINT** is without important change either as regards price or demand.

**WINTERGREEN** is tending lower with natural goods now offered down to  $\$1.40$ . Artificial may be obtained at  $87\frac{1}{2}$  @ 90c.

#### GUMS.

**ASAFETIDA** has been in better demand of late and the situation here is improved. For Prime goods 30c. is yet asked, while Good and Common 25c. and 15 @ 20c. respectively.

**ARABIC** is reported in better demand and numerous sales have taken place within the limits of our quotations.

**CHICLE** continues held at  $28\frac{1}{2}$  @ 30c. though no sales of consequence are reported.

**SENEGAL** is selling with increased freedom in a jobbing way and prices upon the various grades are well sustained.

**SHELLAC** is maintained in firm position and each day witnesses a fair amount of stock distributed in consumptive channels.

**TRAGACANTH** continues in fair inquiry, with further sales of Aleppo at 32 @ 56c.

#### ROOTS.

**GOLDEN SEAL** is steadily maintained at  $22\frac{1}{2}$  @ 23c. though important attention is momentarily withheld.

**IPECAC** is quiet at unchanged values.

**JALAP** has been in request during the week, and sales have been made down to the point of  $22\frac{1}{2}$ c., but at the close 23 @ 27c. was asked, as to quality and quantity.

**LOVAGE** is again showing an upward tendency, influenced by stronger foreign advices. The quotation is now 32 @ 35c.

**SARSAPARILLA**, Mexican, remains quiet at nominally unchanged prices. Jobbing parcels are bringing 10c.

**SENEGA** is inactive, and the same may be said of other staples on the list. No important changes in price are announced.

#### SEEDS.

**ANISE**, Cummin, Coriander, and Fenugreek are jobbing fairly at quotations.

**CANARY**, Smyrna, is held at full  $2\frac{1}{2}$  @  $2\frac{3}{4}$ c., though current purchases do not exceed jobbing quantities.

**CARAWAY**, Dutch, is firm at  $6\frac{1}{2}$  @ 7c., though at the higher figures purchases are made rather indifferently.

**CELERY** is very dull but there is no special pressure making to realize. In instances 16c. is quoted, while others in the trade refuse to shade 17 cents.

**MUSTARD**, California yellow, in a quantity way might be obtained at  $3\frac{1}{2}$ c., though 4c. is generally asked.

**HEMP**, Rape, and other lines are without important change.

#### About Sachet Powders.

When one stops to consider the sachets in the market it is rather surprising that the Rivermouth sachets, just being offered by Preston of New Hampshire, should have got on so well. Read Preston's advertisement. Drop a line to Andrew P. Preston, Portsmouth, N. H., and ask about them, mentioning this journal.

## Druggists' Exchange.

**Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.**

### POSITIONS VACANT.

**DRUG CLERK WANTED** in a pleasant town in New Jersey; must be reliable in every respect and capable of handling nice trade. Address "Salol," care Tarrant & Co., 280 Greenwich street, New York.

**DRUGGIST SALESMEN WANTED** to carry side line of toilet articles; big money; please state which house now employed with. For further information address the Oriana Co., 209 State street, Schenectady, N. Y.—4.

**POSITION** is now offered to a live man; line, drugs, stationery and wall paper; must be licensed; good moral character; At credentials. Those meaning business address H. G. Pierson, Hornellsville, New York.

### POSITIONS WANTED.

**SALESMAN** wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

**SITUATION WANTED** as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

**WANTED, SITUATION.**—A practical and competent pharmacist, first-class worker, neat, sober and reliable, registered in Connecticut; best references. Address "C. A. P.," this office.

**WANTED.**—Position by young man aged 18 to learn the drug business; industrious and willing to work; can furnish good references. Address W. H. Doolittle, Jr., 557A Monroe street, Brooklyn.

### BUSINESS OPPORTUNITIES.

**FOR SALE.**—Best drug business in Wortham, New Hampshire; no competition; yearly business over \$12,000; stock about \$7,000; rent, \$400; must have \$5,000 cash down; no less. Address R. E. George, 20 Plum street, Portland, Maine.

**TO DISSOLVE PARTNERSHIP.**—A first-class drug store is offered for sale in a growing city. For particulars address P. O. Box 1315, Meriden, Conn.—4.

**DRUG STORE** for rent, recently vacated by a successful druggist who has been there for five years; long lease, low rent. Brick building, 25 feet plate glass front. Address "Fine Chance," this office.

**FOR SALE.**—Well established and profitable patent medicine business. Present proprietor wishes to retire from active business for family reasons. Address A. P. Hoxsie, Buffalo, N. Y.

**DRUG STORE** for sale in fast growing village in Long Island; south side; population 700; yearly business \$2,500; price if sold before Spring \$1,000; owner has another store; first-class opportunity for young doctor, single. "Ozone," this office.

**THE SUBSCRIBER** wishes to buy a drug store having a daily trade of \$18 or over, in a town of 8,000 or more. Rent to be not above \$40 per month, and price to run between \$3,000 and \$4,500. Location anywhere west and south of New York City. Address "Class of '93," care of this office.

## I WILL SELL My Patent Medicine Business

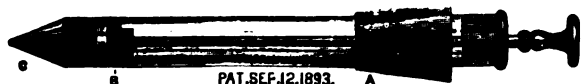
(Reserving a small interest for myself),

KNOWN AS—

## DR. HOXSIE'S Certain Croup Cure,

To a cash purchaser. This remedy is thoroughly established in local and adjacent territory and is highly indorsed by the public and the trade. Proprietor wishes to retire from active business, solely on account of family reasons. Address

A. P. HOXSIE, BUFFALO, N. Y.



**BIG 4 SYRINGE**, Costs \$1.25 per doz.  
Retails for 25 cents each.

Send Postal Note or Postage Stamps for a sample dozen by mail to **WALTER F. WARE, 72 North Third Street, PHILADELPHIA, PA.**

Has a **SOFT RUBBER** packing that is **PERFECT** in suction every time, and occupies small space.

Has a **SOFT RUBBER CONE** shaped point.

Has a movable stopper, that may be placed at any part of the barrel to fit a **SHORT** or **LONG** bottle, (from 2 oz. to 6 oz.)

# The Crown Perfumery Co.'s LATEST NOVELTIES.



### Crab Apple Blossom Series.

Crab Apple Blossom Perfume.  
Crab Apple Blossom Toilet Water.  
Crab Apple Blossom Poudre de Riz.  
Crab Apple Blossom Toilet Soap.  
Crab Apple Blossom Sachets.



### Gold Label Series.

Gold Label Perfume.  
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### EUCALYPTUS AND LAVENDER SALTS,

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#### —\* Violettes de Parme Series. \*

Violettes de Parme Perfume.  
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Violettes de Parme Poudre de Riz.  
Violettes de Parme Toilet Soap.  
Violettes de Parme Sachets.



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**THE CROWN PERFUMERY CO., 160 Fifth Avenue.**

Kindly mention this Journal when writing to Advertisers.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIV. No. 6.

NEW YORK, FEBRUARY 8, 1894.

WHOLE No. 285

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A. R. ELLIOTT, President.

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We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

#### Cannot do Without it.

I have taken your journal for more than ten years and I cannot do without it.

Yours, etc., O. P. COON.  
CHES, N. Y.

THREE books have been published recently which should be in the possession of every pharmacist. These are: The Pharmacopœia of the United States, The National Dispensatory, and DORVAULT'S "L'Officine ou Répertoire Général de Pharmacie Pratique." The United States Dispensatory, which will soon be issued, should be added to the above as soon as it appears.

IT is with pride, which we think pardonable, that we reproduce in our news columns the special vote of thanks extended by the INTERSTATE RETAIL DRUGGISTS' LEAGUE for its aid in furthering the ends of the League, and that we append here the remarks of the able president of the League who in announcing the vote said: "The work done by THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD in support of this organization, and particularly in promoting this meeting, stand out so conspicuously ahead of anything ever done by the journals for the retail trade of the United States, that it is deserving of a special vote of thanks."

#### THE LEAGUE CONVENTION

THE convention of the Interstate Retail Druggists' League was held according to programme in this city on last Tuesday and a full report is given elsewhere in this issue.

While the actual number of delegates in attendance was not large the number of members represented by these delegates is very considerable and the territory covered was wide.

The most interesting feature of the meeting was the recountal of the experience of the organizers in the various New England towns.

At the opening of the convention Messrs. KLINE and MAIN, representing the wholesale trade, confessed to a certain degree of depression in view of the apparent lack of enthusiasm among the retail trade. Before adjournment MR. KLINE testified to his growing confidence in the ultimate success of the plan consequent upon hearing the experience of the organizers throughout Massachusetts.

This was to a very considerable extent the experience of all. The success which had attended the efforts of the organizers in Massachusetts and New York State aroused in every one a laudable desire and hope of emulating that success.

In towns where pharmacists had passed each other with eyes averted, not having spoken for years, there was now good will, good feeling and co-operation. Even the department stores had been drawn into the agreement in some places after they had once been satisfied that nothing was to be gained by staying out. This alone were well worth working for even if no more material results could be expected. But the good will not stop here.

So soon as general organization is effected, and this date seems not far distant, there will be very much more substantial results to offer. In the meanwhile membership in the local organizations can frequently correct abuses which have crept into the trade through the feeling of distrust and ill-natured rivalry which has grown out of the lack of this organization.

Full details as to the plans of the League are given in the able address of the president. This should be carefully read and studied by every pharmacist.

From every side the word comes that

the whole future of the retail trade lies in their own hands. The manufacturers the jobbers and the more thoughtful of the retailers all agree on this. Will you not come in and help?

Not help some one else but help yourself, for where you are now selling at a loss you may sell at a small but certain profit if you will only lend this movement your active support.

#### ANALYSIS OF MECCA WATER.

A RATHER discordant note seems to be touched when we hear that the water of the Zemzem, the sacred well of Mecca, has been sampled and subjected, to chemical analysis in London. Forty years ago, the late Sir RICHARD BURTON made his way to Mecca disguised as a pilgrim. Had he been discovered he would as an "infidel" inevitably have been murdered; but he luckily escaped recognition, and brought back with him a sample of the water from the holy well, which has remained in hermetically sealed tin cases ever since. Every pilgrim is supposed to drink of and wash in this well; but as the supply of water is limited, this devotional exercise resolves itself into a drenching of each applicant as he stands at the brink of the well, and he catches a few drops in his mouth as the water is thrown over him. The analysis showed that the water was abnormally hard; but of living organisms, as might be expected after forty years deprivation of air, there was none. A modern specimen of this would be far more interesting, and would probably show that it is one of those sources of cholera infection to which so many pilgrims to Mecca fall victims.

WHERE a contract of agency is entered into, and the principal agrees to furnish to the agent on consignment certain articles, at a stipulated price, to be paid for when sold, the Supreme Court of Appeals of West Virginia holds, after carefully examining many decisions on the subject, that such articles, when so furnished, remain the property of the principal until sold to a bona fide purchaser, and they cannot be levied on and sold under execution to pay the debts of the agent, and, if so sold, the purchaser gets no title to any such articles as against such principal. Moreover, the agent's right to a

lien for commission and expenditures is declared to be one personal to himself, not transferable, and one of which he alone has the right to take advantage.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Carbonated Laxative.**—J. P. R. asks our assistance in formulating a carbonated laxative which can be administered with effect to patients suffering from hepatic complaints without at the same time inducing nausea from disagreeableness of taste. The following, recommended by a recent writer in *Les Nouveaux Remèdes*, should answer the purpose indicated, as it contains sodium phosphate, a good hepatic stimulant.

Sodii phosphat.....	℥ j
Aque destil.....	℥ x
Syrup. simplicis.....	℥ i j
Tinct. Ilimonis.....	gt. xxv
Acid. citric.....	ss
Sodii bicarbonat. }	ss ss—M.

S.—Two tablespoonfuls, or more, as required.

**Toothache Pellets.** A. R.—In addition to the formulas we have already published you might try the following: Melt 2 parts of spermaceti or wax and dissolve in it 2 parts of chloral hydrate and 1 part of carbolic acid. Dip pieces of cotton into the mixture and let it cool. For use detach a small quantity, soften it with a gentle heat, and press it into the hollow tooth.

**Jumping Beans.**—J. S. T. requests us to explain the mystery of the jumping bean; he thinks the apparent motion of the bean is due to the action of the sunlight and asks us to confirm or disprove his theory.

Botanists are agreed that the motion of the bean is due to the larva of a moth which is inclosed within the bean. The plant producing the bean (seed) belongs to the genus *Sebastiania*, and two at least if not three species of this family have the same peculiarity in their seeds. The young larva hatches from an egg laid externally on the capsule and penetrates the same while quite young. The seeds move more vigorously when very gently warmed, if they have previously been exposed to a temperature below 60° F.

**Spiegler's Test for Albumen.** H. S.—This is prepared as follows: Mercuric chloride, 2 parts; tartaric acid, 1 part; distilled water, 50 parts; glycerin, 5 parts. The urine to be examined is first rendered strongly acid with acetic acid and filtered. With a pipette some of the filtered urine is dropped onto the surface of a Cc. of the testing fluid. The presence of albumen is revealed by the development of a white ring at the point of contact of the two liquids. The presence of peptones does not interfere with the success of the analysis.

**Marking Ink.** L. R.—Among the large number of formulae for marking inks the

following is perhaps the most economical:

Sulphate of copper.....	1 troy oz.
Nitrate of silver.....	3/4
Water of ammonia.....	1 1/2 fl. ozs.
Bitartrate of potassium.....	150 grains
Dextrin.....	150
Sugar.....	75
Soda.....	150
Lampblack.....	15
Distilled water.....	2 1/2 fl. oz.

Dissolve the sulphate of copper in the water of ammonia, and the nitrate of silver in enough of the distilled water; then mix the two solutions. Dissolve the soda, dextrin, and bitartrate of potassium in the remainder of the water, and finally incorporate the lampblack.

The sulphate of copper may be replaced by nitrate of silver, which renders the compound more expensive, and more intense in color. But even when the copper salt is employed the product is satisfactory.

The ink may be used like ordinary ink, and applied to any fabric without previous preparation. The place to be marked should, however, first be ironed over, and when the ink is dry a hot iron should be passed over it.

**Camphene—Campho-Penique.**—A query on the above has been answered by the *New Idea* as follows:

Camphene is an artificial substance obtained from turpentine by the action of the dry vapor of muriatic acid at a low temperature, the vessel being immersed in a freezing mixture during the process; this produces a camphene hydrochlorate. It may be freed from muriatic acid by passing the vapor of the compound substance over dry heated quicklime, when pure camphene passes over. Campho-penique is made according to Dr. J. Robinson's formula, as follows:

Purified carbolic acid (white).....	1 oz.
Gum camphor (best).....	1 oz.

M. et ft. solution.

*Note.*—Camphene was also formerly a commercial name for a lamp burning fluid consisting of spirits of turpentine solved in strong alcohol.

## Cosmetic Formulas.

### DANDRUFF REMEDIES.

(1)

Chloral hydrate.....	30 grains
Glycerin.....	2 fl. ozs.
Bay rum.....	1 fl. oz.
Tr. cantharides.....	1 fl. dr.
Rose water.....	8 fl. ozs.

Mix.

(2)

Vinegar of cantharides.....	2 fl. drs.
Aromatic vinegar.....	2 fl. drs.
Spirit of rosemary.....	2 fl. drs.
Elder flower water, q. s.....	4 fl. ozs.

Mix.

Sponge the roots of the hair well and brush with a moderately hard brush.

(3)

Ether.....	1 fl. oz.
Tr. of cantharides.....	1 fl. oz.
Alcohol.....	1 pint
Oil of rose.....	5 ℥

Mix.

(4)

Borax.....	15 parts
Glycerin.....	30 parts
Decoction soap bark.....	50 parts
Water, q. s.....	300 parts

Mix.

This lotion is to be used at night and in the morning; rub the hair with the following pomade:

Tannin.....	2 parts
Tincture of cantharides.....	5 parts
Vaseline.....	50 parts
Balsam of Peru.....	2 parts
Oil of Mace.....	1 part

Mix.

### TINCTURE FOR BALDNESS.

Resorcin.....	5.00
Alcohol.....	50.00
Cologne water.....	50.00
Castor oil.....	2.00

### POMATUM FOR BALDNESS.

Pilocarpin muriate.....	2.00
Quinin muriate.....	4.00
Sulphur precipitated.....	10.00
Balsam Peru.....	20.00
Mutton suet.....	1000.00

## Artificial Sunlight.

In a dark room with alternating currents of 800,000 voltage, Nikola Tesla, by means of atmospheric vibrations, caused a faint glow of light to appear. Explaining the phenomenon, he said: "If I can increase the atmospheric vibrations, say 1,000,000 or ten thousand millions, I can produce sunlight in this room. Of course, I can increase the vibrations by increasing the voltage. I can make the voltage 8,000,000 as easily as 800,000; but I am not ready to handle 8,000,000 volts of electricity. Currents of such strength would kill everybody in the room. I expect, however, to learn how to control a large voltage. When I have increased the atmospheric vibrations perhaps a thousand times the phenomenon will be no longer electricity. It will be light. I am satisfied that sunlight can be made from electricity without doing harm to anybody, and I expect to discover how it is done. It is a grand idea, and whether the voice through which it came be hushed and still or yet resounds in the proclamations of new truths, the idea itself will be carried to fruitage, and the world will be wiser, whatever may be the issue."

## The Discoverer of Chloroform

For fifty years or more the question "Who discovered chloroform?" has been argued between the advocates of Liebig of Germany and Soubeiran of France.

It was admitted that chloroform was first manufactured in 1831, but there was always some doubt as to the exact month. Late publications prove that neither the German nor the Frenchman discovered chloroform, but that the credit belongs to Dr. Samuel Guthrie, an American chemist, grandfather of Ossian Guthrie, now residing in Chicago.

Mr. Guthrie remembers distinctly his grandfather's laboratory at Jewettsville, N. Y., as it appeared in 1831, when he and the other children were allowed to play among the retorts and crucibles.

In a recent interview Mr. Guthrie is quoted as follows:

"My grandfather had been a surgeon, in the army during the war of 1812. When the war was over he settled at Jewettsville, which was within a mile of Sackett's Harbor on Lake Ontario. Here he built his laboratory and for many years conducted experiments, mainly in explosives, with the result that he was several times blown up and more or less injured. Early in 1831 he manufactured chloroform by distilling chloride of lime with alcohol. He called the product chloric ether or 'sweet whisky.' I remember distinctly that we children playing in the laboratory would dip our fingers into the 'sweet whisky' and taste it. He did not know what use to make of this sweet whisky, so he sent it to *Silliman's Medical Journal*, with a full account of how he made it. These accounts were

published several months before any announcement was made in either Germany or France. There has been but little change in the process of manufacture since the first discovery, but the value of the discovery did not become known until 1847."

### A Hypodermic Purgative.

The purgative action of magnesium sulphate when administered hypodermatically has been studied by two physicians attached to the Maryland Hospital for the Insane. For this purpose forty-six patients were selected who suffered from habitual constipation and required from two to three ounces of a saturated solution of magnesium sulphate to induce one or more free movements of the bowels. With a hypodermic syringe, having a capacity of two drachms, and properly sterilized, sufficient of a two per cent. solution of the salt was injected to represent from 1.86 to 4.5 grain. It was found that small doses acted as efficiently as large doses, and that one small dose followed in a short time by a second small dose proved more effective than a single large dose. The injections were made on the outer aspect of the left arm, midway between the elbow and the shoulder, and caused no unpleasant local or constitutional sequelæ. One hundred injections were made in all, successfully sixty-seven times and unsuccessfully thirty-three. Fifty-three times a single evacuation of the bowels was induced; ten times, two movements. In two cases of melancholia with habitual constipation that resisted nearly all purgatives the injections were absolutely futile. The shortest interval that elapsed between the giving of the injection and the evacuation of the bowels was three hours, the longest fourteen hours, the average seven.

### A Physician's Notes on the Changes in Strength of the Preparations of the New United States Pharmacopœia.

Acetum opii is about one-tenth weaker than formerly.

Phosphoric acid is nearly twice as strong as formerly. It is, however, to be noted that this change in phosphoric acid does not affect the physician in his use of the dilute acid, as this is prepared by a new proportional formula, so as to keep its strength the same as before.

Sulphuric acid is apparently a little weaker than formerly, but not really so, as it has not in the past actually attained the standard fixed for it.

Sulphurous acid is nearly twice as strong as formerly.

Calx chlorata is two-fifths stronger than formerly.

Calx sulphurata is nearly twice as strong as formerly.

All decoctions and infusions not specifically mentioned in the Pharmacopœia are only one-half as strong as formerly. (By an error in writing the table on page 58 of the Pharmacopœia these are made to appear as being four times as strong as they are in reality.)

Liquor sodæ chloratæ is about one-fourth stronger than formerly.

Pepsin is required to have a digestive power over albumen of not less than 1 in 3,000.

Saccharated pepsin is six times as strong as formerly, and one-tenth as strong as pepsin.

Tincture of cannabis indica is one-fifth weaker than formerly.

Tincture of colchicum seed, digitalis, henbane, lobelia and belladonna have been so slightly altered in strength as to make no appreciable difference in their exhibition.

Tincture of cubeb is only half as strong as formerly.

Tincture of gelsemium is one-seventh stronger than formerly.

Tincture of musk is only one-half as strong as formerly.

Tincture of nux vomica, previously without any effective standard, must now contain three-tenths of 1 per cent. of total alkaloids, while the extract of the same drug must contain 15 per cent. of total alkaloids, and its fluid extract must contain 1½ grams total alkaloids in 100 Cc.

Tincture of opium, tincture of deodorized opium and camphorated tincture of opium have suffered inappreciable increases of strength.

Tincture of physostigma is about twice as strong as formerly.

Tincture of stramonium seed is nearly twice as strong as formerly.

Tincture of veratrum viride is about one-seventh weaker than formerly.

Wine of ipecac is between one-fifth and one-fourth stronger than formerly.—*From a recent address by Dr. H. H. RUSBY.*

### The Choice of Tumblers.

In selecting a tumbler the principal points to consider are: 1, the quality of the glass; 2, the color of the glass; 3, the thickness of the tumbler; 4, the size of the tumbler; and, 5, the shape of the tumbler. We shall consider each of these points in turn.

To begin with, the quality of a tumbler depends in great measure on the materials of which the glass is made. The ordinary tumblers used in our homes are made of a common quality of glass; and while such tumblers will, of course, answer the purpose, those made of what is known as "flint glass," or "crystal," are to be preferred wherever the extra expense can be borne. Even the most inexperienced person can tell at once the difference between crystal and ordinary glass. If he strike the edge of the tumbler with his finger a beautiful crystalline sound is produced by the flint glass, whereas ordinary glass gives forth only a dull sound.

The quality of the glass depends also, in great measure, upon the thoroughness of the annealing. Glass is a most curious product. If, after being in a molten state, it is suddenly cooled, it becomes so brittle that the least thing will cause it to fall into a powder, as is beautifully illustrated in the ingenious toy known as "Prince Rupert's Drop." This is made by simply dropping a small piece of melted glass in water, so as to cause it to cool at once. The bead of glass thus produced appears to be ordinary glass; but if even the very tip end be pressed between the fingers the entire piece of glass will at once fall into a fine powder, to the great astonishment of the spectator.

It is to guard against this danger that all glassware is annealed; that is to say, it is allowed to cool slowly after it has been fashioned into tumblers, vases, bottles, etc. The more slowly it is cooled the stronger the glass becomes; and if it can be kept a few weeks before using, it becomes even stronger, for the molecules of glass are then able to work themselves around into the best position for withstanding strains.

Thin tumblers are, in all cases, to be preferred. A thick tumbler seems, in

some unaccountable manner, to destroy the delicate taste of a beverage. A poor beverage is better if served in a coarse glass, for its inferiority is thus somewhat disguised, but a good beverage is made better by being drunk from a thin tumbler.

As to the color of the tumbler, the pure white is to be recommended for soda-water purposes, as it shows better the tints of the beverage. A very pretty effect, however, can be secured by making the border of the tumbler tinted, the body being of white glass. Customers are, however, somewhat suspicious of what they are getting, hence the body of the glass should be white, or if colored the tint should be so light as to keep the glass perfectly transparent.

## CORRESPONDENCE.

### The Dose of a Cough Mixture.

*Editor AMERICAN DRUGGIST:*

The formula for a cough mixture contributed by "Galen, Jr.," to the January 25 issue of THE DRUGGIST AND RECORD is all the author claims for it, furnishing a preparation of agreeable appearance and palatability while therapeutically active. There is one omission in the directions which I with others would like, however, to see rectified. I allude to the dosage. The mixture contains in each fluidrachm about ¼ grain of morphine, an amount which can be administered generally without danger of untoward results. Is this the dose intended by the author?

Respectfully yours,  
WM. J. QUENCER.

THE WINDERMERE PHARMACY,  
400 West 57th street, New York.

The formula to which Mr. Quencer has reference read as follows:

One of the most excellent preparations for a cough which the writer has ever seen can be made by the following recipe:

Fluid extract of wild cherry.....	6 fl. ounces
Fluid extract of white pine.....	6 fl. ounces
Fluid extract of cubeb.....	3 fl. ounces
Fluid extract of ipecac.....	1 fl. ounce
Chloroform.....	3 drachms
Morphine acetate.....	24 grains
Ammonium chloride.....	5½ ounces
Sugar.....	7 pounds
Water.....	4 pints
Syrup tolu, a sufficient quantity.	
Acetic acid, a sufficient quantity.	

Add the fluid extracts to water and agitate thoroughly; allow to stand for an hour or more, and filter clear, adding to contents of filter 2¼ ounces ammonia chloride. The ammonia will all be dissolved by the liquid in passing through. Then dissolve in the filtrate 7 pounds sugar by cold percolation and to this add 3 drachms chloroform; agitate thoroughly until admixture is perfect. To the syrup add 24 grains of morphine acetate previously dissolved in a small amount of water, and acetic acid q. s. to make clear. Make up to 1 gallon by adding syrup tolu of the new Pharmacopœia.

[Each teaspoonful of the above will contain a little over ¼ grain of morphine, and as the other ingredients need not figure particularly in stating the dose we are of opinion that the mixture could be safely administered as follows: To adults, 1 teaspoonful; children from 6 to 14 years old, 15 drops; 3 to 6 years old, 5 to 7 drops; 6 months to 1 year, 3 to 5 drops. The mixture not to be given to children under 6 months old. To be repeated three or four times a day and given in water.]



## Convention of the Interstate Retail Druggists' League.

The special meeting of the Interstate Retail Druggists' League was convened in Ionic Hall, Terrace Gardens, this city, on Tuesday morning, February 6, with President Canning, of Boston, in the chair.

President Canning read his address as follows:

### ADDRESS OF THE PRESIDENT.

Gentlemen of the Interstate Retail Druggists' League, and Fellow Druggists:

The large number here assembled in response to the call for this meeting evidences an active interest in the cause for which we have come together. As you must have perceived, by a perusal of the published announcement, the New York city branch is principally responsible for the convention being called at this particular time and place. Your president was only too glad to accede to this request, believing that the great metropolis is the pivotal point in this great awakening of the retail drug trade to a sense of its immense power, hitherto latent, in alleviating the many evils besetting the commercial or business side of our calling. Our experience in New England clearly demonstrates that we have comparatively smooth sailing, after having once organized a great city. After Boston, came Providence, Worcester, Lowell, Springfield, with several organizations in New Hampshire. So too, my dear friends, in a larger way, with New York thoroughly organized as the natural commercial head, will the organizing of the rest of this great country be made easy; it is a forcible argument in itself.

Again you will perceive, gentlemen, that the purpose for which this meeting is called is stated in general terms, so that we may be able to discuss and transact any business that may tend to "the advancement of the League and the cause for which it was instituted."

I would not advise at this time any tampering with the laws or plan of construction of the League, leaving such action to the future after both are more thoroughly tested. It is generally bad policy to "tinker a new kettle." Time enough for soldering when it proves leaky! The plan of the League is a good one, being National, State and local in its makeup. Like our National Congress its construction is such that we can absolutely voice the sentiments of the whole country by its delegates in convention assembled. Let us put forth our energies at present in the direction of perfecting our organization, so that the measures adopted here to-day may be the quicker carried into full effect.

Since the League was started some three years ago many local organizations have been formed which can be directly traced to its paternal influence. Many of these organizations have not yet joined the parent body, however, preferring to wait and see if it is "a go." I would say to such associations "Had it not been for the League you had never been born." However large the aggregate amount may be, the individual fee is but one dollar per year! What an insignificant little sum in itself, compared to the immense returns that might result from such trifling investments! Do not wait "to see if it is a go," but chip in your dollar and your voice with it, and help to make it "a go!"

Just at present the League wants money. Experience has taught us that it is generally uphill work to get the druggists locally to organize among themselves—petty jealousies seem to stand in the way (why they exist I do not know). The uptown druggist does not care to meet his downtown brother, or "the north side has always held itself aloof from the south side," etc., etc. Just give your president the means to send two or three bright organizers to such communities, when, lo! the "uptown" and "north side" are sitting side by side with the "downtown" and "south side," at the banquet board, just beginning to realize that the interest of one is the interest of all, and wondering why they did not come together long ago! Some of the delegates here present can tell you their experiences of this nature.

Your secretary and treasurer, yes, and your president, ought to be salaried officers, in such a business organization as this. I can safely include the president, for two reasons—first, because I have held the office long enough to know something about the time, labor, energy, and neglect of personal interests required to conscientiously endeavor, at least, to fulfill the office, and second, because my term expires before the League will be rich enough to make such appropriation.

Until we are thoroughly organized we need the "dollar a head," and can make good use of it. After that time, however, the League machinery can run smoothly at a much smaller figure.

Is there a necessity for such an organization as this? For answer let us for a moment compare the average pharmacy of the past with the average as you find it to-day and then ask yourselves the question, is there much hope for that ideal pharmacy of the future which we read about? The laboratory was the *res* in the apothecary store of the past; in that of the present the *exception*. He of the past was not simply an agent, dealing (not compounding) in ready made prescriptions of great manufacturing houses; his neighboring physicians were not supplied by

other great manufacturing houses with remedial agents in such convenient form that he can prescribe and dispense at the same time in his own office; the apothecary of the past was not the victim of pernicious legislation nor was he obliged to pay more than his just share of taxation; he of to-day has all these troubles to contend against, and even more, for I have not yet said anything about the proprietary medicine question. Verily, gentlemen, unless we put our heads together we shall soon require a telescope to find the business end of the drug store. With an organization such as the League contemplates many of our difficulties may be at least abridged if not entirely surmounted, and further inroads may be prevented.

Now, gentlemen, allow me to trespass upon your valuable time by expressing a few thoughts upon the proprietary medicine question, and how to regulate the sale of these goods. The patent medicine is peculiarly a growth of the latter half of the present century, and will eventually be regulated, beyond question, by law. In the mean time no one is better adapted to act as distributor to the trusting consumer than the druggist; he can best discriminate as to those safe to sell, and those which never ought to "see the light of day." We will not now attempt to place the blame for the unbusinesslike competition in the sale of these articles, but will endeavor to supply the remedy.

A plan to regulate the sale of proprietary medicines to approach perfection must embrace the following elements: it must, to bring about the maximum amount of success, contain the minimum amount of dependence on "good faith" alone; it must be a sensible business measure, appealing to the business interests of proprietor, jobber and retailer alike; it must bring about the "greatest good to the greatest number"; it must contain as little burdensome detail as possible to either of the tripartite interests involved; last and most important, it must have the active co-operation of all concerned.

The following simple plan already adopted by the League at its last annual convention, and having the indorsement of every local organization thus far to which it has been submitted, seems to contain all the necessary ingredients. It differs from the compromise measure adopted at the recent meeting of the N. W. D. A., and commonly known as the Detroit plan. Therefore, if it meets with your approval, I would suggest that it be called the League plan. Here is the first recommendation in form: *Resolved*, That the Interstate Retail Druggists' League respectfully recommends.

That proprietors accept orders for full quantities, with rebate discount, only from regular jobbing druggists, recognized as belonging to the number who will faithfully observe the prices and conditions established by the manufacturers, said manufacturers or proprietors to sell no goods direct to retailers—said jobbing druggists as agents to entirely control the sale to retailers, at uniform prices, regardless of quantity.

*Resolved*, First, That each manufacturer is hereby requested to adopt a system of marking, by which his goods may be traced.

*Resolved*, Second, That, in other respects than the foregoing, we recommend that the adoption of the details for carrying out this plan be the same as those adopted at the Detroit meeting of the N. W. D. A., emphasizing our desire to have the clauses in the form of letter from manufacturer to wholesale agents relating to "recognized" and "voluntary cutters," and to "League or Association embracing 80 per cent., etc.," rigidly enforced.

It is thought that this plan is nearer perfection than any so far suggested, and even if after a trial it is found wanting we can strengthen it. It is certainly easy to carry out. The manufacturer would be enabled to greatly reduce his counting-room employees, and I claim that he would sell even more goods than at present on account of the added good will from the retailers. Less inducement to substitute, though I do not in this connection desire to cry down certain forms of so-called substitution.

Under this plan, the only party given any extra work to do is the jobber, but he will be glad to take all these retail customers off the manufacturers' hands, and it will be for his best interests as a business man to help his customers in getting living and bill-paying prices. You must remember too, that all this is based upon organization of the retailers, thus a slippery jobber would think twice before daring to run such a gauntlet.

Now as to the retailers; there are two classes that now buy direct from the manufacturers; first, a very small class, able to do so for their own legitimate sales, and second, a larger class buying direct in order to divide up with their neighbors. In either class the incentive for buying direct is the same, viz., to make the profit on *buying*, close competition preventing their doing so on the *selling* end. Both classes of these buyers will be glad to make a fair profit on selling rather than a meager one on buying. Supposing the cutter for a time succeeds in getting the goods under this plan, he no longer has a ten per cent. advantage of you! Supposing after the plan is put into effect some manufacturer cannot resist the temptation of a check in hand? You still have the League platform! But I will not offer any more arguments in favor of this plan—I want to leave something for you to say from the floor.

I have but two other recommendations to offer. One to this effect, viz., "That the fees of local branches shall be due upon entering the League, and thereafter annually from that date." My reason

for this is obvious; this is a business organization and we want all local organizations to come in at once, upon forming. There is no rule laid down for our guidance on this question, though I believe that dues have been supposed to be payable at some fixed date. My idea is this—if dues are payable in January, for instance, we do not want a local organization formed in September hesitating to come in because the year begins in January. They may change their minds in three months. Let them come in immediately.

I respectfully ask you to appropriate a sufficient amount to cover the secretary's hotel and traveling bill attendant upon this meeting.

In closing, let me extend the privilege of the floor to all present, expressing the hope that any action we may take may be the unanimous sense of the general meeting. In the advent of a division, all questions will be decided by the votes of the representatives of local branches and the officers of the League, including the executive State officers.

I trust your deliberations at this meeting may be earnest, honest and productive of good results to you and your fellow pharmacists. At the same time let me express the hope that your discussions may be with wisdom well tempered with fraternal good fellowship. After you have left here and gone to your homes, put your resolves into immediate effect.

This was referred to a committee composed of G. W. Cobb, of Boston; Victor Kostka, of New York City, and Thos. Layton, of St. Louis.

The president then introduced Mahlon N. Kline, of Philadelphia, who said that he felt somewhat depressed, for he felt that the "harvest was great and the laborers few." He further stated that it was a pleasure and a privilege to co-operate with Mr. Canning, the president of the League, for through his long acquaintance with him he had learned the value of Mr. Canning's aid, the earnestness of his purposes and his devotion to duty. He also said that he had become particularly impressed with the fact that so far as had been officially brought to notice of anyone interested there was lacking that enthusiastic support of the retail trade which is so essential to the broadest success of the plan. This support the Interstate League is in a position to furnish.

While but five or six of the proprietors have adopted the plan literally the large majority of the 200 or 300 proprietors whose goods are sold under the rebate plan have signified their willingness to fall in with the plan when its practicability has once been clearly demonstrated.

Chas. A. Osmun, president of the New York City branch, was then introduced and submitted on behalf of the New York City branch the resolution proposed by Victor Kostka and printed in the February 1 issue of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

The resolutions were referred to the committee on president's address.

N. W. Stiles, president of the Boston branch of the League, being called on stated that they had secured between 350 and 400 signatures to the Detroit plan in that city.

Mr. Canning then directed attention to the valuable aid which the traveling men of the drug trade could render if their assistance could be enlisted, and introduced Irving M. Smith, of Providence, a traveling man for Geo. L. Claffin & Co., who Mr. Canning said had done a great deal of good by organizing the Mortar and Pestle Club, which embraced practically all of the Rhode Island drug trade.

Mr. Smith referred to the conditions existing in the wholesale trade prior to the introduction of the rebate plan and to the skepticism with which that plan had been received. He said that the present plan was as feasible for the retail trade as was the rebate plan for the jobbers.

G. W. Johns, from Rochester, spoke of the formation of the Monroe County Association, embracing Rochester.

W. P. Draper, of Springfield, Massachusetts, reported favorable progress in that

city. He said that the organizers had called upon the leading department store of that city, the Scott syndicate store, and that this store was now working together with the Springfield Association and would probably agree with the druggists on the whole price list. He also said that the cutter who had been the sorest thorn in the side of the local trade had been called upon and when he was convinced that he could no longer get the goods at a lower rate than his neighbors, the retailers, and that they would meet him on any cut he might make, he capitulated, saying that he might as well come in as nothing could be made by staying out. This cutter is now chairman of the pricing committee of the local association.

Thos. Layton, of St. Louis, ex-president of the League, was then called upon and gave a brief history of the formation of the St. Louis Druggists' Association. This showed that local association alone was not sufficient to protect the retailer. The schedule of price of the St. Louis association had been abandoned. The retailers of St. Louis, said Mr. Layton, had completely lost confidence in the proprietors as a class, and the experience of the St. Louis trade was such that it would be difficult to again enlist their aid.

On the 18th of January Mr. Layton asked for a conference with the local wholesale association concerning the League convention, which meeting was postponed until February 1. He wanted them to say whether or not, in adopting the Detroit plan, they would so far support the League plan that they would refuse to handle all proprietary goods which were thrown out by the Interstate League. Mr. Layton said that the retailer is the absolute monarch of the situation if he only will get together.

Francis M. Harris, president of the Worcester, Mass., branch of the League, told of the successful organization of the druggists of that city after 20 years' cutting. He thought that the League plan was preferable to the Detroit plan. The convention then adjourned for luncheon. On reconvening in the afternoon Secretary Robt. J. Frick, of Louisville, presented his report.

Mr. Canning submitted a statement of the condition of the treasury showing that the League had \$211.30 cash on hand, to which should be added \$11 just received from the Dubuque association. Some moneys were also to be paid in at this meeting by association just joining.

The committee on credentials reported through their chairman, W. C. Durkee, who stated that there were present 42 delegates, six representing bodies who had not yet paid their fees to the League, and two of whom represented the National Wholesale Druggists' Association.

The committee on president's address reported in favor of adopting the several recommendations contained in that address.

M. A. Kline, of Philadelphia, said that he had been particularly gratified by the reports from the East. These reports, he said, demonstrated the truth of certain propositions. "In 1883," said Mr. Kline, "we made a signal failure because we attempted to establish a uniform price throughout the whole country, and that with a margin which made it worth while to enlist the active competition of the shrewdest business men." The history of the St. Louis association showed that the endeavor to try to obtain full prices was a serious error. "Mr. Draper's report," said Mr. Kline, "showed eminent good sense in going about this matter in a different spirit. You must meet the cutter on his

own grounds. The solution of the question was not a solution of obtaining \$1 for \$1 preparations, but of preventing the class of men who have done so much to damage your business from further ruining it."

L. F. Stevens, of Brooklyn, then stated that the suggestions of the New York branch should not be considered as a new plan at all but merely as an addition to the League plan proposed with a view to strengthening the hold of the plan upon the retailers.

Chas. Dennin, of Brooklyn, said that inasmuch as a combination of the proprietors as proposed under the tripartite plan had been pronounced illegal, it being in the nature of a trust, he would propose a scheme which would obviate the "trust" feature. Under this each proprietor would advance his prices so that he could guarantee a profit of 10 per cent. to the jobber, of at least 10 per cent. to the retailer and still have a surplus of from 1 to 3 per cent. over his present net price. This surplus he could pay into a beneficent or insurance association, membership in which would go with membership in the League.

The various recommendations of the president's address were taken up seriatim, and all were adopted with the additional suggestion, made by the committee that the President's expenses in attendance in this meeting be paid.

This was followed by a general discussion of the subjects treated of which was participated in by G. W. Johns, of Rochester; Thos. Layton, of St. Louis; G. W. Cobb, of Boston; John Pfeiffer and W. O. Werner, of Brooklyn; Wm. Drohn, of Springfield, and others.

Mr. Layton also submitted a resolution passed by the Wholesale Druggists' Association of St. Louis, recommending that the Interstate League at this New York meeting adopt the Detroit plan. This was signed by the Collins Bros. Drug Co., the Daugherty-Crouch Drug Co., the Hopkins-Weller Drug Co., the J. S. Merrill Drug Co., the Meyer Bros. Drug Co., and the Moffett-West Drug Co.

Mr. Tscheppé, in response to the request for a report from the New York branch, stated that he must acknowledge that the lack of interest and the lack of attendance upon the meeting was in painful contrast to the enthusiasm and interest displayed by the officers of the National organization. He said that in this city the conditions were particularly unfavorable for concerted action. He referred to the excellent and solid local organization of the German druggists numbering some 130 members. He spoke of the various antagonistic elements in the trade, the young men being arrayed against the old. With the excellent example set by the League before them he felt, however, that it might be possible to harmonize and amalgamate the drug interests in the city.

The committee here reported on the suggestions recommended by the New York City branch. [See this journal for February 1st.] The committee recommended the suggestions as being probably valuable in part for local application, but scarcely feasible of recommendation by the League in general.

Mr. Canning asked Mr. Layton to take the chair and then proceeded to state his reasons for opposing the adoption of the New York resolutions. He said that he felt sure that the adoption of any such resolution would be seriously detrimental to the best interests of the League. That their adoption would antagonize the manufacturers where co-operation was so integral a part of the League plan and that

even if desirable in the abstract they could scarcely be acted upon as the delegates present had not consulted with their constituents on the measures proposed in these resolutions.

Thos. F. Main, of New York, vigorously supported the views advanced by Mr. Canning and said that the experience of many years' service on the National Wholesale Druggists' Association committee on legislation had taught him the danger of legislative interference of any kind in commercial matters. The suggestion of employing a lobbyist was particularly impractical. If a lobbyist is employed to protect any particular interest he makes it a part of his business to see that a bill antagonistic to that interest is introduced at least once each session so that he can kill the bill and thus, apparently, earn his money and insure his continued employment. As to the publication of formulas of proprietary medicines, a bill of this kind is introduced every year by the lobbyists, who then levy blackmail on the smaller manufacturers at \$5 to \$20 each. The larger manufacturers had stopped contributing long ago.

Alfred Hy. Mason, of Seabury & Johnson, directed the president's attention to the fact that his recommendations altered the Detroit plan materially in so far as that plan had referred to "wholesale dealers," while Mr. Canning had changed this to "wholesale druggists." He reminded Mr. Canning that when he had proposed this change at Detroit he had been unable to obtain it and had professed himself satisfied with the Detroit plan.

To this Mr. Canning replied that he had at that time felt that half a loaf was better than no bread, but that on further investigation he had found that the original Detroit plan did not even give half a loaf. Furthermore that the amount of bread that the League could get depended upon its strength. If it was strong enough and asked for it it could get the whole loaf.

Victor Kostka spoke in favor of the resolutions. He said that there were some weak points in the resolutions, he was aware, but he was also sure that there were good points as well. He only wanted the suggestions discussed so that any good features it possessed might be adopted. His experience in endeavoring to organize New York State had made it clear, at least to him, that something else was needed to arouse the interest of the New York State pharmacists than the League platform alone. This he had endeavored to furnish in the New York resolutions.

On motion of D. J. Barnaby the resolutions were respectfully tabled, as their adoption was considered inexpedient, and at the same time thanks were extended the New York branch for the suggestions made.

An unpaid account of expenses rendered by ex-Secretary Willet, of Kansas City, was reported on by the secretary of the association. Mr. Willet was a delegate to the Montreal meeting and refused to render an itemized statement. The bill was referred back to the committee with instructions not to pay until an itemized statement was rendered.

W. C. Durkee offered a resolution authorizing the printing and distribution of blank petitions supporting the League plan and asking the aid of the jobbers, through their traveling men, for their distribution.

N. W. Stiles, of Boston, offered a resolution of thanks to THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for the excellent work done by it in promoting the objects of the Interstate League.

Secretary Frick offered to amend by including the names of other pharmaceutical journals.

President Canning was opposed to the amendment, saying, "The work done by THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD in support of this organization, and particularly in promoting this meeting, stands out so conspicuously ahead of anything ever done by the journals for the retail trade of the United States that it is deserving of a special vote of thanks."

The secretary withdrew his amendment and the vote of thanks was unanimously carried.

Caswell A. Mayo, in acknowledging as editor of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD the distinguished honor conferred, said that the journal was always keenly alive to the needs of the retail druggist. That the League, being devoted to the best interest of the trade, would continue to receive in the future the support which that journal had given it in the past.

Mr. Canning then said that he hoped that the good example set by THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD would be followed by the other drug journals.

Charles Dennin, of Brooklyn, stated that he felt that the statements made by the president concerning the necessity of funds for organizing deserved attention, and that he would take pleasure in tendering on the spot a personal donation of ten dollars to the general treasury. The donation was accepted with thanks.

G. W. Cobb recommended the organization of local branches together under a sectional union so arranged as to cover in the main one market district. A New England Union to cover the Boston territory, a New York Union to cover not only New York City but Jersey City, Brooklyn, Connecticut, and the territory immediately tributary to New York City. Such an association he was already organizing in New England.

There being no further business, the meeting adjourned.

#### LIST OF DELEGATES PRESENT.

W. P. Draper, of the Springfield, Mass., Association; F. M. Harris, of the Worcester branch; L. H. Leavitt, secretary of the Massachusetts Pharmaceutical Association, also member of the Apothecaries' Guild of Boston; G. Pfeiffer; R. C. Werner and L. F. Stevens, of the Brooklyn branch of the League; Henry J. Alfreds, president of the Rhode Island branch; Irving M. Smith and E. K. Gridley, of Providence, of the Mortar and Pestle Club; Thomas Layton, of the St. Louis Apothecaries' Association; G. W. Johns, of Rochester, of the Monroe County Association; George W. Cobb, George W. Flynn, and N. W. Stiles, of the Apothecaries' Guild of Boston; Wm. C. Durkee, Boston, State executive for Massachusetts; Victor Koska, of New York City, State executive for New York; Charles A. Osmun, president of the New York City branch; Henry Canning, of Boston, president of the League; Robert J. Frick, of Louisville, secretary of the League; Chas. Blaew, Rochester; M. N. Kline, of Philadelphia, and Thomas F. Main, of New York City, of National Wholesale Druggists' Association; Alfred Henry Mason, Oscar C. Winemann, Thomas E. Davis, O. Dimond, H. A. Salmon, A. Amend, T. J. Barnaby, T. O. Morrison, G. A. Symes, F. W. Koch, William Schevelles, Carl E. Kepler, Adolph T. Tscheppe, Oscar Kars, Carl Schur, Thomas W. Linton, M. F. Bender, and Caswell A. Mayo, of New York City.

#### Gotham Gossip.

A representative of this paper, who is aware of Geo. J. Seabury's political leanings, held an interesting conversation with that gentleman a few days ago, on the Wilson Tariff bill and other subjects of National legislation. The opinion was hazarded by THE DRUGGIST AND RECORD man that times were not so bad as the calamity howlers would have us believe, and to clinch his argument he made reference to the flourishing condition of the Seabury factories, which are in full blast despite the supposed industrial depression. To this Mr. Seabury made ready response. "The increase of our business at the present time," he said, "is due wholly to our foreign trade, and consists in an increased demand for war materials in the line of surgical and antiseptic dressings for South American countries, chiefly Brazil. The drug trade as a distinct branch of commerce is the least affected by the prevailing industrial and commercial depression. Their products are consumed only through absolute necessity. The conditions under which we are now suffering superinduce an artificial demand for medicines to allay worryment the result of losses in business and capital. 'One swallow doth not make a summer'; because our industry is fairly prosperous it is not in any sense a thermometer for other manufacturers."

The name Richard D. Young is a well-known one among American perfumers and dealers in perfumery products. All such will no doubt be glad to learn that the bearer of that name is now actively connected with a widely known and reputable firm of perfume manufacturers who have lately begun to push vigorously the sale of their goods in the United States. The firm we allude to is the Crown Perfumery Company, of London and New York. The New York office, located at 160 Fifth avenue, is an office home of which any firm might be proud. Oil pictures of great artistic value adorn the walls and attest to the aesthetic tastes of the principal, W. S. Thompson. Mr. Thompson is making his home for the present in the United States but is expected to leave soon for London, where new premises have been recently opened in a building specially designed for the needs of a manufacturing perfumer.

The initial number of *The Alumni Journal* of the New York College of Pharmacy bearing date of February, 1894, has just been received. It is a handsome little periodical of some forty pages, fourteen of which are devoted to articles of scientific interest and the remainder to general pharmaceutical topics, advertisements and news notes. It starts with a formidable list of assistant and associate editors, FRED. HOENTHAL and HARRY HELLER representing the assistants, and CHARLES RICE, CHARLES F. CHANDLER, ARTHUR H. ELLIOTT, HENRY H. RUSBY and VIRGIL COBLENTZ, comprising the teaching faculty, being named as associates. *The Journal* will appear nine times a year and be published at 269 East 23d street, New York, in the interests of the graduates and members of the college.

The wholesale and retail drug business at No. 60 Fulton street, formerly conducted by Fairchild Brothers & Foster, has been taken over by Robert E. Milligan and Edgar C. Skinner, who have formed a copartnership under the style of Skinner & Milligan. Mr. Milligan is a graduate of the class of '89, N. Y. C. P. Dr. Skinner has been for several years at Quarantine as Deputy Health Officer of the Port of New York. The new firm will

make a specialty of the filling of ships' medicine chests.

William Speth, the druggist of Broadway and Kosciuszko street, Brooklyn, who was accused of a mistake in compounding a prescription which resulted in the death of 5-year-old William Steltzenmuller, of 1110 DeKalb avenue, and who was subsequently exonerated by the coroner's jury, has been discharged. His release was granted on the formal request of Assistant District Attorney Callahan.

Illness has been a visitor to the houses of a number of our New York druggists during the past week. Hugo Koechling, of 51 Eighth avenue, is sick with pneumonia, and Thomas E. Fraser has been indisposed for a few days with influenza.

C. D. Burton, Ph.G., class of '93, N. Y. C. P., who is now engaged in business in his native town, Susquehanna, Pa., was in New York City last week visiting among other friends, his former teachers in the old college on Twenty-third street.

The *National Druggist* of St. Louis, has opened a branch office in New York for the accommodation of Eastern advertisers and subscribers. The office is in charge of J. B. Lehman and is located at 150 Nassau street.

Chas. Finch, the First avenue druggist, who was suffering with blood poisoning for the past three weeks, has so far recovered as to be enabled to again attend to his duties.

Louis Roediger, has bought out the interest of John Probin at No. 63 Division street, New York City.

Hazard, Hazard & Co. are said to be in the hands of the sheriff.

#### New York State.

Herbert C. Pharis, the Silver Springs druggist, was married recently to Miss Ida Hollister.

Mr. Gardner has bought out the interest of Osmar Klopsch in drugstore at 49 Myrtle avenue, Brooklyn.

The local association of druggists at Amsterdam have decided to meet the cut prices made by the dry goods stores.

A S. Lawyer's paint and oil store was broken into recently and a small amount of money stolen from the money drawer.

On Sunday last the drug store of H. N. Clark at Cornwall was entered by burglars and \$250 in money and checks carried off.

The laboratory of the C. N. Cotton Perfume & Extract Co., Earlville, is finished and has been taken possession of and moved into.

John C. Ryan, class of '90, N. Y. C. P., who will be remembered by his classmates as "class poet," was married to Miss Flora Roraback, of Bridgeport, Conn., a few weeks ago. Mr. Ryan is now in business for himself at Bridgeport, Conn.

C. W. Fuerke, class of '91, N. Y. C. P., has opened a handsome pharmacy at 66 Forest avenue, Buffalo. Mr. Fuerke was formerly located at 135 Goodell street. He opens the new store with new stock and fixtures, and every prospect of a successful undertaking.

#### Boston.

Weeks & Potter have contributed \$100 to the fund for the unemployed.

Carter Carter & Kilham moved into their new store on Merrimac street last week.

John F. Neill has gone into business for himself; his store is at 19 Union street.

The board of pharmacy will hold an examination this month; it will commence on the 18th.

The insolvency proceedings in the case of Harry G. Travis, 275 Hanover street, have been continued to May 11.

President Whitney, of the board of pharmacy, is pronounced in his opposition to the interchange of certificates.

Samuel T. Jeffers, 1273 Dorchester avenue, was arrested recently and charged with an alleged violation of the liquor law in selling liquor without a prescription.

Harry B. Stull, who recently married an actress in New York and sprang into notoriety shortly after by attempting to secure a divorce, is now living very quietly with his wife in Boston.

Andrew P. Preston, of Portsmouth, N. H., has applied for membership in the Boston Druggists' Association. Wm. C. Durkee, Ph.G., became a member of this organization at its last meeting.

Samuel Neill, a popular and successful traveling salesman for Geo. C. Goodwin & Co., was an attendant at the annual dinner of the Boston Druggists' Association. Mr. Neill enjoys a wide acquaintance with New England pharmacists.

The building occupied by the Minard Liniment Co., 273 Commercial street, was burned recently. During the fire a large quantity of their goods were stolen. Officers have arrested two men for the theft and have recovered 12 gross of liniment.

The Massachusetts College of Pharmacy has benefited in one sense by the business depression, for within a few weeks a number of students have been enrolled who have stated that they were unable to obtain employment and therefore came to the decision of bettering their knowledge of pharmacy by a course at this institution.

A correspondent of the *Boston Globe* calls attention to the fact that the recent codification of the district police laws just presented to the Legislature no notice whatever appears to have been made of the poison act of 1888, whereby all records of sales of poisons are to be "at all times open to the inspection by the officers of the district police." He thinks that if this law were to be thoroughly enforced as it should be a few murders and suicides might be avoided.

Up to Friday, January 26, Arthur A. Chesley was proprietor of a drug store on South street, in Rosindale; he was succeeded in the ownership of the store on the day in question by his clerk, Jackson S. Potter. Chesley came to Rosindale from Chicopee about 15 months ago; he commenced business at once and soon became extremely popular with the residents of that district. He was thought by some, however, to be too intimate with the wife of his landlord, and it is alleged was soon compelled to seek a new boarding place. This did not remedy matters, for soon after Chesley sold out to his clerk Potter, and he himself disappeared, and it is said that he was not alone when he took his departure from Rosindale.

### Liquor Legislation in Massachusetts.

Liquor legislation affecting the drug trade is no stranger to the Hub during the yearly sessions of the legislature, and the present year is to be no exception to the rule; we are to have an abundance of agitation in this respect.

A hearing has already been held upon

House bill No. 87, which contains the following provisions:

SECTION 1.—No license of the sixth class described in section ten of chapter one hundred of the Public Statutes shall hereafter be granted to any person who is not a registered pharmacist, actively engaged in business on his own account; nor to any such registered pharmacist unless he shall present a certificate from the State board of registration in pharmacy stating that, in the judgment of said board, he is a proper person to be intrusted with such license, and that the public good will be enhanced by the granting of said license.

SEC. 2.—For each certificate so granted by the board of registration in pharmacy said board shall be entitled to receive a fee not exceeding one dollar, to be paid by the applicant. Such certificate shall not be valid after one year from the date thereof.

SEC. 3.—Chapter two hundred and seventy of the acts of eighteen hundred and eighty-nine, and also all acts and parts of acts inconsistent herewith, are hereby repealed.

At the hearing which was held last Friday, Edward S. Kelley, Ph.G., of Kelley & Durkee, was the first witness. He was of the opinion that the license should not be granted to any person not a registered pharmacist. "There has ever been a class of druggists who have devoted their entire time to the liquor traffic and have prostituted pharmacy," said the gentleman, "and I highly favor the passage of such a measure as is to-day proposed. S. A. D. Shepard, Ph.G., said he knew something of the druggist liquor traffic. "Why do not these fellows," he asked, "come boldly out and engage in the liquor business? The liquor dealers of this city ought to combine against the druggists' rum shops." Mr. Shepard thought the burden placed upon the State board of pharmacy by the bill might be too great. He had great confidence, however, in the board.

S. A. Bancroft, of Boston, wanted legislation to kill off the abuses complained of. The bill was not strong enough nor sufficiently radical.

Chairman A. L. Aldrich, of the Bourne town committee, came all the way from the Cape to enter his protest against existing conditions, and ask for the enactment of legislation restraining the liquor traffic carried on in drug stores.

Rev. Alfred Noon, secretary of the Massachusetts Total Abstinence Society, favored the bill in the main.

The most unique testimony adduced was that given by Henry Faxon, of Quincy, whose views upon the temperance question have given him a world-wide reputation. Mr. Faxon said: "The difficulty is not so much with the present law, but with the people who clamor for legislation and won't do anything to help out the enforcement of the laws. Druggists are the hardest people I have ever tried to handle. They can teach the devil deception. This legislature is not smart enough to pass a law to catch these fellows. I believe there are honest druggists, but even they have to be watched. Liquor controls politics everywhere. Fall River and South Boston are the two worst places in Massachusetts. This legislation is too simple. Make the punishment on the first offence six months in the house of correction."

A perusal of this proposed measure convinces one that as a law it would greatly increase the duties of the board of pharmacy and add some obnoxious features to their work. It was at first rumored that the members of the board were fathering this act, but this was untrue as will be seen by the following disclaimer which was presented to the liquor law committee at the hearing above mentioned:

To the Committee on Liquor Law and to Whom it May Concern.

The attention of the board of pharmacy has been called to House bill No. 87. We desire to state most emphatically that we had not been consulted, and knew

nothing about this proposed act until after it had been presented and referred to the committee. As officers of the State we recognize our obligations to the people, their right to petition, and the right of the legislature to place upon us such duties as in their judgment are wise and proper. We also claim the right to protest against duties involving, as this proposed act does, the issuing of a certificate stating "that in the judgment of said board he is a proper person to be intrusted with such license, and that the public good will be enhanced by the granting of said license," unless provision is made setting forth clearly and definitely the duty and right of the board to investigate any and all doubtful cases, and to compel sworn statements or answers to certain questions by the board or their agent, and that such evidence may be accepted as a reasonable and sufficient ground for approval or rejection.

Section two provides for each certificate granted a fee not exceeding \$1. This sum would doubtless be sufficient to pay the actual expenses of all applicants personally known to the board, but the great army of 8,000 and more possible applicants not known to the board, and requiring careful, persistent and exhaustive investigation of all the facts bearing upon the question of "proper person" and "public good," involving age, personal responsibility, past and present record, location, etc., would of necessity demand much time, travel and expense, and the resources of the board to-day are only sufficient to meet with most rigid economy the more important duties now laid upon us. Not one of the members of this board have sought the position they occupy, and have accepted it only from a sense of duty and loyalty to the people of this commonwealth, and the elevation of their calling from the disgrace brought upon it by certain unscrupulous, migratory pretenders.

We do not wish to be understood as in any way objecting to the purpose and intent of this proposed bill, but if it must be made our duty, define it clearly, give us sufficient authority and means to do it properly. We don't want to hazard the good work we are now doing by a farce. Any act that is in the line of our present work, any act that will help eliminate from the ranks of pharmacists mere saloon druggists, we shall gladly welcome.

In this connection we ask for a special act making the obtaining a certificate of registration in pharmacy by fraud punishable by imprisonment for not less than three years.

Signed.

H. M. WHITNEY,  
F. H. BUTLER,  
J. A. RICE,  
A. K. TILDEN,  
JOHN LARRABEE, } Members of  
the Board of  
Pharmacy.

### Ohio News.

F. H. Coblenz, Springfield, says trade is good.

F. A. Garwood has invested \$3,000 in real estate in Dayton, O.

L. A. Eckert, of Toledo, has purchased the drug store of A. F. Flies, Maumee, Ohio.

Al. Farrens bought the Hicks Bros. drug store at Hastings and took possession on January 1.

Ad. Bakous says trade is no good and has quit giving orders unless it is orders to buy something of him.

Ed. Ambal has recently purchased the drug store of Whittlesey & Gee a



Edgar. C. W. Ambal will conduct the business.

Theodore Troop buys muriatic acid and sulphuric acid in car lots and has placed his order for two cars with a Cincinnati jobbing house.

Messrs. Beck & Zimmerman both are members of Springfield Gun Club, and Beck took the prize on Friday, January 19, shooting clay pigeons.

F. F. Wilsey, druggist, of Ravenna, was elected county superintendent of Buffalo Co. last Fall, and before assuming his official duties leased his store to Dr. Bentley.

Ex-Sheriff A. B. Little recently sold his interest in the India Spice & Drug Co., Marietta, to the other members of the firm, and purchased the store on Third street run by the late James Holdren.

Correspond with Henry C. Boyd of Newport, Ky., for low prices on Kentucky whisky for direct shipment from bond, glycerine 18 $\frac{1}{4}$  including original cans in lots of 5,000 pounds, turpentine and rosin in car lots.

J. J. Brown has just returned home from a visit to Eastern Ohio. Mr. Brown's hobby is, "No tobacco or whisky sold by Brown," and a few years ago he emptied a lot of whisky in the gutters in front of his store.

#### Cincinnati Chemists.

Mr. Cahill, formerly with Martin & Heister, is now with L. Klayer.

At the recent meeting of the Ohio board of pharmacy, which was held at Greenwood Hall, 110 applicants applied for registration.

Madame Ruppert, the skin specialist, having sued one of her agents for the price of cosmetics supplied, the defendant contended that as the preparation was a poisonous one she could not legally sell it, therefore that the contract was void. Judge Lumley Smith upheld this view so far as the poisonous preparation was concerned.—*Chemist and Druggist*.

Dr. Ung Chock Nam, the Chinese physician, has been excluded from the privilege of registering and practising in Cincinnati. Dr. Prendergast has been reading up a title on Chinese medical ethics, and he finds that in China the august title of "Doctor" descends from father to son independent of educational preparation on the part of the holder of the title. Attorney Martin will endeavor to secure the privilege of registration for his Celestial client under the years of practice law.

C. B. Nixon, the night clerk at Effinger's drug store, had an exciting experience with burglars at 2.30 A.M. recently. The night clerk sleeps in the rear of the store, and at the hour named was awakened by a noise. He listened, and heard some one trying to get into the rear door. He hastily put on his clothes and grabbed his revolver. The noise increased, and in a moment there was a crash. He waited for no more, but shot. The bullet went wide of its mark, and the burglars ran. Officers were soon on the scene, and searched the neighborhood for the burglars, but up to a late hour they had not been found.

#### Southern Notes.

Thomas & Co. is a new firm in the drug business in Clarksville, Tenn.

Chatham Sinclair has moved into his new drug store in South Wheeling, W. Va.

J. P. Snyder, a popular druggist of Louisville, Ky., and Miss Maude Pritchard were recently married.

J. C. Means has leased the old Benoist store, Natchez, Miss., and will shortly open a first class drug store.

Burglars recently entered the drug store of Henry & McCoy and relieved their money drawer of about \$10.

F. W. Punch, a druggist at Birmingham, Ala., was stricken with paralysis recently, but is reported to be improving.

F. M. Owens, of Houston, Tex., sold his entire stock of goods to Messrs. Mensing & McCullough, druggists, of Galveston, yesterday.

R. L. & F. M. Owens, of Grapeland, Tex., have sold their stock of drugs to Will Totty, who will move the goods into the storeroom under his hotel.

H. L. Herring, who has been engaged in the drug business at Dalton, has decided to leave that place, and may again locate at La Grange.

J. H. Bailey, of Hillsboro, Tex., has made an assignment, and the stock of drugs and fixtures was purchased by J. M. Duncan, late cashier of the Farmers' National Bank of that city. Business will be resumed at the old stand.

Dr. Wiley Rogers and Mr. George L. Thompson, formerly a clerk for T. P. Taylor & Co. Louisville, Ky., formed partnership yesterday and will conduct a drug store at First and Oak streets under the firm name of Rogers & Thompson.

A. H. Lowry, at Bridgeport, Tex., failed. R. E. Martin removed from Haskell to Seymore, Tex. J. M. Gibson opened a new store at Prospect, Tex.: W. L. Roper, a new store at Itaska, Tex., and M. J. Wallace at Mount Pleasant was burned out.

A. R. Bond, until recently salesman with H. W. Williams & Co., wholesale druggists of Fort Worth, Tex., has accepted a position with Parke, Davis & Co., and simultaneously took unto himself a wife. He married Miss Myrtle Phenix, one of the prettiest and most popular young ladies of Fort Worth. Mr. Bond is Texas representative for his house with State headquarters at Fort Worth.

#### Michigan Mention

Martin & Giddings, druggists at Jackson, were burned out last week. Loss not known.

C. H. Robinson will shortly open a new drug business on Wealthy avenue east, Grand Rapids.

The Grand Rapids Drug & Chemical Company have begun suit against Dennis L. Rogers to recover \$400.

S. B. McKay has sold his drug store on East Sandwich street, Windsor, Ont., to B. Brown, of Port Colburn.

Charles E. Stanger, druggist at Dundee, recently slipped and fell, breaking his leg above the knee in two places.

The U. S. Capsule Company, of Jersey City, filed articles of association recently. Their Michigan office will be located in Detroit.

Hinchman & Sons, the burned out druggists at Detroit, Mich., are already established in their temporary quarters and are filling all orders which come in.

Thieves recently looted E. L. Carbine's drug store at Battle Creek. The contents of the money drawer and a quantity of cigars, tobacco, liquor and patent medicines were taken.

The Detroit Chemical Co. have filed their annual report. Capital stock authorized, \$25,000; paid in, \$12,000; real estate, \$5,000; personal property, \$8,595; debts, \$4,239; credits, \$2,644.

Fire last week destroyed a block of stores at Caseville. Among the losers was Dr. J. W. Jackman, druggist. Damage \$4,000. Insurance about \$1,200. The town was without adequate fire apparatus.

The Detroit Pharmaceutical Company filed its annual report last week as follows: Capital stock, authorized, \$100,000; paid in, \$40,000; personal estate, \$38,707.86; debts, \$19,100.21, and credits, \$17,218.21.

C. W. Blake, druggist at Kalamazoo, left an oil stove burning in his store one night last week. The store caught fire before morning, damaging it to the extent of \$1,500. The entire stock of drugs was ruined by fire and water. Insurance, \$500.

J. B. Russell, formerly superintendent of Parke, Davis & Co.'s works, soon departs for New York to fill his new position with J. T. White & Co., at a salary variously estimated at from \$10,000 to \$15,000 per annum. A reception was held in his honor last week, at which were present some of Detroit's most prominent citizens.

#### Western Notes.

Dr. John O. Johnson has the building for his office and drug store almost completed in Hudson, Ill.

The Goetsch Drug Company, South Milwaukee, Wis., was organized last week with a capital stock of \$2,000.

P. A. Dargey, Chas. F. Booth and T. A. Fosselman have organized the Fosselman Drug Company at Butte, Mont.

The drug clerks and apprentices over 18 years of age of Milwaukee, Wis., will shortly organize a Drug Clerks' Association.

The Mercer Chemical Co. succeeds the Mercer-Whitmore Co., of Omaha, Dr. B. F. Whitmore having retired from the firm January 18.

W. L. Heilman, secretary of the Nebraska Pharmaceutical Association, is now in California. He will return with his wife, who has been visiting there.

C. L. Kellogg is preparing to open a drug store in the building now occupied by Ernst & Thompson, Milwaukee, Wis., who will move to other quarters.

Since the purchase of Orr's drug store, Grand Junction, Col., by Messrs. Joseph H. Kahn and Herman Frone, the place has already assumed a bright and cheerful appearance.

Dr. A. B. Sholars, of Little Rock, Ark., has sold his stock of drugs to J. B. Lightfoot and C. Read, who will carry on the business under the firm name of Lightfoot & Read.

Ira Lybarger, the druggist of Howard, Neb., who disappeared about Christmas, has returned to his home, and so far as can be learned has given no reason for his strange actions.

Alex. Frye, a 17 year old negro, while working at a Boonville, Mo., drug store, found a rubber tube connected with a barrel of alcohol. He sucked the tube vigorously and died soon afterward.

The drug store of M. E. Collins & Co., Dell Rapids, S. D., which was recently closed by an injunction because of violating the prohibition law, was opened today, the proprietor being required to give bonds in the sum of \$500.

J. E. Hickman, a late Seattle druggist, now residing in Everett, Wash., has just received the good news that he has fallen heir to the snug little fortune of \$138,000 or thereabouts, by the death of Peter Hickman, of Berlin, Germany, most of the money being in Berlin real estate and bank securities.



## OBITUARY.

Dr. William T. Gempp, a well known manufacturer of soap, 57 years old, of St. Louis, Mo., committed suicide last week by shooting himself.

William F. Eberbach, son of Christian Eberbach, died at Ann Arbor, Jan. 25, of consumption. He was 30 years of age. Mr. Eberbach was a graduate of the University of Michigan College of Pharmacy, and, until failure of health prevented, was an active member of the firm of Eberbach & Son, Ann Arbor.

Clarence J. Coleman, a former druggist and resident of Dowagiac, died last week in Chicago. He was formerly a member of the drug firm of Coleman & Carney, and afterward of Coleman & Devendorf. After selling his business interests in Dowagiac he went to Grand Rapids, where he resided until a few months since. He was a well known and respected member of the trade. He left a wife, but no children.

Frank C. McKenna, a well known and popular traveling salesman, died at his room at 25 Bowdoin street, Sunday, January 28, from a stroke of apoplexy. The funeral occurred on the following Wednesday. Mr. McKenna was known to every druggist and soda water dealer in eastern Massachusetts. He was 85 years of age. He entered the employ of James W. Tufts as a junior clerk in 1888, advancing rapidly from one position to another until he became one of the leading salesmen in the business.

Dr. Eli Thayer, well known for many years by the residents of the North End, Boston, Mass., died at his home in Wyoming recently. He was born at the North End 80 years ago, and at an early age entered the drug business on Hanover street. He was in business there for over 50 years. Dr. Thayer opened a drug store in Weymouth a great many years ago—the first store established in that town. He retired from business about ten years since, and moved from Boston to Wyoming. A son and two daughters survive him. The remains were interred in Weymouth cemetery.

## Boards and Associations.

**NORTH DAKOTA BOARD OF PHARMACY.**—W. T. Parker, secretary of the board, informs us that the regular meeting of the board has been postponed until March 14, 1894. It will be held at Fargo.

**NEW YORK ALUMNI ASSOCIATION.**—A pharmaceutical meeting of this association will be held at the college building on Wednesday evening, February 14, 1894, at 8 o'clock. A lecture on Nervous Exhaustion will be delivered by Dr. Cyrus Edson, president of the Sanitary Board of New York City. All members of the association and their friends and all who are interested are cordially invited to attend.

**ILLINOIS PHARMACEUTICAL ASSOCIATION.**—The next meeting of the Illinois Pharmaceutical Association will be held in Peoria, August 14, 15, 16, 1894. Peoria is noted for the splendid manner in which they entertained those in attendance at the association meeting years ago, and Frank Fleury says he is assured by the local secretary, Charles A. Strathman, No. 838 Main street, "that Peoria will do her level best to entertain all who come in a manner that they will be right glad they came."

**CALIFORNIA BOARD OF PHARMACY.**—Following is a list of the names of applicants who were successful at last examination,

January 18, 1894: Licentiate—O. W. Kimball, Redlands; J. L. Reeve and A. Olsen, San Francisco; J. B. Baker, Soquel; A. D. McMaster, Placerville.

Assistants—C. M. Rankin, Placerville; C. A. Ingram, San Francisco; J. P. Buckner, Paso Robles; H. M. Moulton, San Bernardino; L. Fattou, Lorin; A. J. Brannagan and H. L. Smith, of San Francisco. Information as to subsequent examinations may be had from John H. Dawson, secretary, San Francisco.

**PHILADELPHIA ALUMNI.**—The fourth of this season's social meetings of the Alumni Association of the Philadelphia College of Pharmacy was held in the lecture room on the afternoon of January 23. Dr. Benjamin Sharp, of the Academy of Natural Sciences, delivered a lecture on Hawaii from observations made during his visit to the islands last Fall. The political aspect of the situation there was briefly dwelt upon, the address, which was illustrated by photographs, turning chiefly upon the natural features of the islands, the volcanoes in particular. Miss Mabel H. Bardsley and Miss Iona M. Nowlen, of the Mount Vernon Institute of Education, also took part in the entertainment.

**COMMISSION OF PHARMACY, STATE OF NEW HAMPSHIRE.**—The second quarterly meeting of the commissioners of pharmacy was held at Eagle Hotel, Concord, Wednesday, January, 24. The following passed a successful examination and received certificates as registered pharmacists: Dr. John C. Parker, Farmington, N. H.; Edgar S. Woodward, Lancaster, N. H.; Charles S. Perry, Hillsboro Bridge, N. H.; Jas. J. Kerwin, Manchester, N. H.; Edward N. Thompson, Wolfboro, N. H. Junior examination: Patrick H. Brown, Farmington, N. H.; Albert W. Vittum, Dover, N. H.; William F. Plummer, Dover, N. H. The third quarterly meeting will be held the fourth Wednesday in April (25th).

**WASHINGTON STATE BOARD OF PHARMACY.**—At a meeting of the Washington State Board of Pharmacy held at Spokane January 8 and 9 out of eleven applications for registration the following were granted certificates: As licentiates in pharmacy, from other States, W. C. Bently, St. Joe, Mo.; J. Walter McLean, Worcester, Mass. Assistants by examination: W. B. Purdy, Oakesdale, and Cara A. Neyland, Davenport. Since the pharmacy law took effect June 6, 1891, six hundred and forty-three names have been registered as licentiates in pharmacy, and fifty nine as assistants. The board now consists of A. M. Stewart, president, Tacoma; W. H. T. Barnes, secretary, Seattle; C. F. Krum, Spokane; L. D. R. Collins, New Whatcom; C. G. Snyder, Davenport. The next meeting will be held at Tacoma in May.

**PENNSYLVANIA PHARMACY BOARD.**—The State Pharmaceutical Examining Board of Pennsylvania held an examination in the Central High School, at Philadelphia on Saturday, January 20, 1894. Three hundred and forty candidates appeared for examination, one hundred and sixty-seven applying for registered pharmacists' certificates, and one hundred and seventy-three for qualified assistants' certificates. Twenty-six of the former and sixty-four of the latter class were successful. The next examination will be held at Harrisburg in April. Applicants for examination should apply to the secretary of the board, Charles T. George, Harrisburg, Pa., after the middle of March, for the necessary blank form of application, and the exact time and place of the examination. Applicants should always state,

when applying for blanks, for which certificate they wish to be examined.

**ILLINOIS BOARD OF PHARMACY.**—The board met Jan. 9, 1894, for examination, at which meeting the following passed as registered pharmacists: C. W. Armstrong and C. A. Dresbach, Decatur; E. E. Kennedy, Bethany, and E. H. Thomas, Argenta; E. M. Bunnell, Dixon; H. H. Pinny, Wilmington; S. Suter, Bloomington, and W. G. Williams, Quincy, passed as assistant pharmacists.

At a previous meeting held January 8 officers and members of the board were elected as follows: president, L. C. Hogan, Chicago; vice-president, H. H. Green, Bloomington; secretary, Frank Fleury; treasurer, I. N. Coffee, Cairo; A. Zimmerman, Peoria, and F. M. Schmidt, Chicago.

A statement of the receipts and expenditures of the Association for 1893 was presented at this meeting. The receipts amounted to \$7,876, and expenditures, \$7,896.62; deficit, \$20.62.

The next meeting of the board for examination and general business will be held in Chicago at 173 Thirty-ninth street on February 13, 1894.

**THE OKLAHOMA BOARD of Pharmacy** met in regular session at El Reno, January 2. A. F. Masterman, president, and C. P. Wickmiller, secretary, present. The vacancy caused by the resignation of Dr. J. M. Craig not having been filled. There were present for examination thirty-four, of which fourteen passed a satisfactory examination. Six others registered by virtue of being graduates of reputable schools of pharmacy. The following are the names of the successful candidates: G. W. Baker, Alva; W. R. Kelly, Watonga; A. J. Kirkpatrick, Oklahoma City; R. M. Scott, Oklahoma City; A. L. Engle, El Reno; L. F. Michael, Ponca City; Geo. Lage Newkirk; T. H. Varner, Stillwater; Chas. A. Dow, Pond Creek; R. D. Reynolds Cloud Chief; L. E. Garnett, Perry; E. R. Thomas, Perkins; E. R. Case, Newkirk; F. B. Boller, Perry. Graduates: L. J. Hord, Cross; J. H. Miller, Newkirk; H. L. Rankin, Gray Horse; W. A. Ziemondorf, Enid; J. A. Settle, Yukon; A. H. Engle, Perry. This was the largest attendance since the organization of the board. The next meeting will be held at Perry, Oklahoma, on the third day of April.

**MINNESOTA BOARD**—The board of pharmacy held its last meeting at Minneapolis, adjourning on January 20th. The board has been conducting its first practical examinations at the college of pharmacy at the State university. Previously the examinations have been principally written and the board has met at the State capitol, but in the future practical work in compounding and dispensing prescriptions will be a most important feature of the examination. The class numbered 45, and 23 out of this number passed. The following are graded as pharmacists: Harry H. Hazeltine, Edward H. Houghton, Ernest F. Haglund, William F. Michel, Fred. W. Schmidt, Martin Nelson, all of Minneapolis; C. Prescott Wyman, Duluth; John Frisch, St. Charles; James Henderson, Paynesville; Adolph G. Laack, Rochester, and Larry L. Urheim, Eau Claire. The following were granted certificates as assistants: Arthur Archibald, Louis P. Haish, Patrick Dube, Henry T. Kertson, Minneapolis; Peter R. Lorensen and Nels Nelson, St. Paul; Herman N. Tollefson, Kasson; John McGraw, Winona; Eugene Pfefferle, New Ulm; James H. Tyrrell, Grand Meadow; Thomas J. Grif-

5th, Mankato. In future or until further notice, the examinations will be conducted in the laboratory of the college of pharmacy, State university, Minneapolis, and will consist of the reading and compounding of prescriptions and the manufacture of simple official pharmaceutical preparations. In practical work the candidate will be marked on methods employed, accuracy, and general appearance of the finished product or prescription. In addition to the above, the candidate will be given the usual examination in pharmacognosy and both oral and written questions in pharmaceutical chemistry, theoretical pharmacy, posology and toxicology.

### Railroads are not Bound to Carry Samples as Baggage of Agents.

A railroad company is not bound, as a part of its contract for the transportation of a traveler, who is employed as a traveling salesman for a trading firm, according to a recent decision of the Supreme Court of Kansas, to carry as his personal baggage a case of sample merchandise belonging to his employers; and where it receives and checks such case without knowledge of its contents or ownership, a part of which is afterward stolen from its baggage room without negligence on the part of the company, it is not liable to the owners for the value thereof. Nor does the fact that his fare is paid for by his employers, and that the occasion for his making the journey is the prosecution of their business, in any manner affect the contract with, or liability of, the railroad company.

### Thoughts of a Physician.\*

Every physician who has been spared to a great age can look upon pharmacies ever changing. On the Ariel wings of memory he can glance into a thousand sick rooms and sniff the odors of drugs no longer known. They had their day and the fashion changed.

Men couldn't be soundly cured without calomel once, and veratrum viride was a later triumph. Cod liver oil was once the Utopian remedy for phthisis.

When I was a student in the university and hospitals in Philadelphia solutions and syrups of bromide of potassium were the popular tippie for all sorts of diseases, and quinine became the universal panacea for the laity just as it was losing ground with the profession, but the coal tar derivatives are pushing all others to the wall. The chemists would seem to have gone mad in their laboratories and to have applied the match to a new system of fireworks, so bewildering are their nimble coruscations of saccharine, pyrocin, hydroxylamine, methacetin, thalin and exalgin. But the sparks die out as suddenly as they astonished, and many of them are already forgotten.

I am aware that it will be urged that the average physician of to-day is much more wary in the use of drugs, and that upon the whole smaller doses prevail and greater discrimination is exercised. I have heard, too, that the world has grown better, wars less numerous, man more concerned in raising his neighbor than in raising himself on his neighbor. But I note that the sentinels of old empires grudgingly regard each other across the borders; that Justice in the South is not only blindfolded, but has her hands tied willingly behind her back; that the saloon domineers our politics, that the shadow

\*From the "Transactions of the New Jersey State Medical Society," address of the president.

of the prison falls across the threshold of the temple. And I know that in 1889 there were imported into this country \$18,186,290 worth of drugs used in medicine, and that the succeeding years have not shown a less amount. I know, too, that there has been no inverse ratio existing between the pharmacies and the physicians. In an essay on this topic in 1889 I showed from the statistics of commerce and navigation of the United States for the year ending June 30 the gross amount in pounds of the chief drugs used in practice which were imported to that date. I have just received from the Secretary of the Treasury the volume containing the statistics of the importations for the year ending June 30, 1892, and I find the following startling items:

Quinine sulph.....	2,686,877 ounces
Cantharides.....	10,446 pounds
Balsam copaiba .....	208,011 pounds
Aloes.....	255,894 pounds
Asafoetida.....	125,557 pounds
Ipecac.....	88,829 pounds
Jalap.....	112,601 pounds
Manna.....	49,835 pounds
Ergot.....	125,148 pounds
Cubebs.....	115,974 pounds
Nux vomica.....	1,892,437 pounds
Opium (9 per cent. mor- phine).....	587,121 pounds
Rhubarb.....	118,874 pounds
Salicine.....	5,152 pounds
Morphine and all salts thereof.....	42,801 ounces
Calomel and other mer- curial medical prepa- rations.....	12,630 pounds
Alkaloids and alkalies to the amount worth.....	\$827,230

### Effects of an Over Dose of Chloralamid.

Dr. M. H. Lackersteen, of Chicago, in a letter to the *Medical News* (Nov. 25, 1893), relates his experience with a patient who swallowed a mixture containing 140 grains of chloralamid. The next morning the patient was "in a stupor, from which he could be aroused for a moment and answers questions intelligently. His pulse was weak, and twenty-five beats to the minute, but fairly perceptible and perfectly regular. Respiration was slow but rhythmic. The surface of the body, the head, and the hands were warm and comfortable."

He was free from pain, and his headache was gone. "A teaspoonful of aromatic spirit of ammonia, properly diluted, and repeated in fifteen minutes, soon brought him to consciousness and raised his pulse to sixty." He went to sleep again, awaking of his own accord in the evening. His health has been good ever since, and the enormous dose seems to have helped rather than harmed him.

This item will go on record and will prove favorable to chloralamid.

### How to Recognize Horse Flesh.

The method is based on the use of the well known iodine reaction of glycogen, a body which is a constant constituent of horse-flesh. The finely divided flesh is boiled with four times its weight of water, and the resulting broth treated with dilute nitric acid, to precipitate albuminoids, and filtered. Saturated hydriodic acid is then added, so that the two liquids remain in distinct layers, and at their plane of contact a red or violet ring forms should glycogen be present. In the event of extraction of the glycogen with water proving inadequate, a solution of caustic potash

containing an amount of KOH equal to three per cent. of the weight of the flesh must be substituted.

The reaction is said to be characteristic, as it is not yielded by the flesh of other domestic animals.—*W. Brautigam and Edelmann, Pharm. C. H., 1893, xiv., 557, through Chem. Zeit.*

THE AMERICAN DRUGGIST takes us to task for labeling the Philadelphia residence of William Penn as his birthplace. A mistake like this is as unpardonable, if not quite so fatal, as putting up morphine instead of quinine, and we can only hide our diminished head and regret that we didn't think twice before taking the photographer's word for it.—*Art in Advertising.*

### Trade Notes.

The E. L. Patch Co., of Boston are introducing a variety of sachet powders put up in neat bottles to retail at about 10c. Write for a sample lot, mentioning THE DRUGGIST AND RECORD.

In purchasing alcohol it is well to specify and see that you get "Webb's." It has long held first place as a C. P. article. Write for terms in quantity lots to James A. Webb & Son, 165 Pearl street, New York, or order through your wholesaler.

The Scates Medical Company, of Westbrook, Me., have devised a new plan for the regulation of prices on the elegant line of proprietaries manufactured by them, and druggists desiring particulars are invited to address the firm at the above address, mentioning this paper.

With their accustomed liberality H. Planten & Son have provided a liberal supply of useful memorandum books, which they will supply free to the druggists for distribution. Write H. Planten & Son, capsule makers, 224 William street, New York City, for free samples, mentioning this journal.

Dryden & Palmer, the well-known manufacturers of rock candy syrup, have removed their offices to 87-93 Bedford avenue, Brooklyn, where they have just completed one of the largest and most perfectly equipped factories in America for manufacturing rock candy, refining rock candy syrup and burnt sugar coloring.

Dr. B. Wolff, lecturer on dermatology at the Atlanta Medical College, writes: "While a pupil and voluntary assistant of Dr. Unna, of Hamburg, I had opportunities of observing the remarkably rapid and satisfactory results gained by the use of his plaster and salve mulls. They go far to simplify the details of dermatological practice, and possess the advantage of accuracy of apportionment of ingredients and convenience of application."

Evidence of the amazing popularity of Hance Brothers & White's "Frog in your Throat" is found in the fact that go where you will in the United States and Canada there will be found in drug or confectionery store the laconic interrogation "Frog in your Throat?" English chemists have even caught the fever and the palatable little troches are having quite a run on the other side. "Frog in your Throat" was a new phrase to English pharmacists, but has now become very commonplace since the introduction of the cough lozenges by the agents of Hance Brothers & White.

The finished appearance of a bottled

compound is much enhanced by a bottle cap. If druggists were more generally aware of the cheapness of these little articles they would be more generally used. Lehmaier, Schwartz & Co., 38 Bleecker street, New York, make a specialty of their manufacture and will send samples of the different varieties with rates on request.

Armstrong's effervescent granules as supplied in bulk to pharmacists at one-half the price of some makes are a valuable side line and prove ready sellers, the growing appreciation of the public for condensations of all kinds opening a splendid field for their sale. Full details as to packages, free samples, etc., can be obtained on request to the A. G. Armstrong Co., Boston.

"R. & H. Chloroform" is probably the best known of the high class brands of C. P. Chloroform. It is the product of the Roessler & Hasslacher Chemical Co., manufacturing and importing chemists, 73 Pine street, New York, being manufactured from acetone under U. S. patent. This chloroform meets all the requirements of the U. S. Pharmacopoeia and can be safely administered for anæsthetic purposes.

A preparation which gives unfailing satisfaction to every user is "Fehr's Compound Talcum Powder." This excellent compound has been before the profession since 1868 and has steadily grown in favor until it is now regarded as the most trustworthy of all dermal powders. Physicians everywhere prescribe it, and druggists who aim to keep the things prescribed by doctors should see that stock is replenished when exhausted.

A paper embodying a number of formulae as prescribed with marked success in both hospital and private practice in different phases of La Grippe, giving in detail the chemistry of all the antipyretics and other agents now being largely prescribed by eminent practitioners in the prevailing disease, will be sent by the publishers to any druggist who cares to drop a postal card to the publishers, John Wyeth & Brother, Philadelphia, Pa.

As side lines or as profitable extras at the soda fountain the preparations of the E. S. Burnham Company, 120 Gansevoort street, New York, will commend themselves to every live pharmacist. Free samples of such popular hot soda compounds as Clam Bouillon, Liebig's Extract of Beef (Burnham's brand), Bouillon Elite (liquid beef), Bouillon Elite (liquid chicken), can be obtained at the cost of a postal card by addressing the E. S. Burnham Company at 120 Gansevoort street, mentioning this journal.

Henry Troemner's scales are recognized as the standard of excellence, all the latest improvements being utilized in their manufacture. The glass box scale advertised in this issue is a popular favorite with dispensing pharmacists, having been especially designed for the general counter and prescription work. A catalogue of the different makes showing new combinations and designs in metric weights, etc., as manufactured by Henry Troemner, Philadelphia, issued recently will be forwarded to those mentioning this journal.

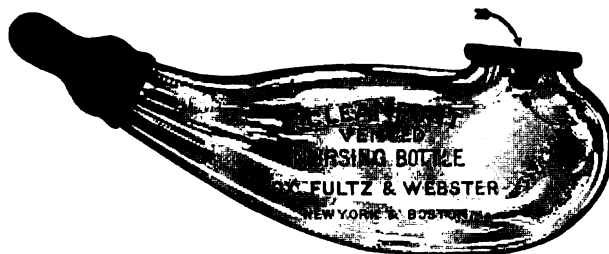
The Crown Perfumery Company have recently produced a very handsomely illustrated catalogue of their specialties. It consists of a booklet of lithographs showing the different styles of bottle, box and label in use for Crab Apple Blossoms, Perfume, Powder and Soap; Gold Label

Perfumes; Violettes de Parme; Peau d'Espagne; Matsukita du Japon, Fleur de Lys, and the numerous other specialties of the company. This catalogue is a real art gem and its production must have entailed great expense; copies will be mailed free to any druggist mentioning this journal.

The attention of our readers is directed to the full page advertisement in this issue of Low's Art Tile Soda Fountains. In bringing the various merits of their fountains to the notice of druggists the Low Art Tile Company make the point that they are not in the Trust, but are independent and make their own terms and prices. It is claimed that colder soda with less ice can be drawn from Low Art Soda Fountains than from those made of any other material. Druggists desiring to purchase new fountains or to exchange old ones cannot do better than communicate with the Low Art Tile Company, at 950 Broadway, Chelsea, Mass., as they have always a large number of second-hand fountains of all makes for sale cheap.

### A Hygienic Nurser.

The accompanying cut illustrates a new design in nursing bottles, for which a patent has been granted Fox, Fultz & Webster, the well known manufacturers of and dealers in druggists' sundries of New York and Boston. The "Cleanfont" embodies in its design—as the name implies—the two great requisites of the



THE CLEANFONT NURSER.

modern nursing bottle—*cleanliness* and *freedom of flow*. A special advantage claimed for the new nursing bottle is the construction of the vent and nipple.

The "Cleanfont" retails at 35c. and may be obtained through any firm of jobbing druggists or direct from the manufacturers, Fox, Fultz & Webster, 52 Park place, New York, and 18 Blackstone street, Boston.

### The National Capital.

The city of Washington is an object of perennial interest to all patriotic Americans. Not alone because it is the great throbbing heart of the mightiest and grandest Republic the earth has ever known, but also on account of its material magnificence. All Americans take pride in its beautiful avenues, majestic architecture, stately homes, and well stored galleries and museums as things of grandeur and beauty in themselves, apart from the historic interest with which they are invested. It is a hope and aspiration of all "Young America," at least, to some time or other visit the capital of his country.

The Baltimore & Ohio R. R. offers unequalled facilities in aid of this desire. All its through trains between New York, Philadelphia and Baltimore on the east, and Pittsburg, Cincinnati, St. Louis and Chicago, on the west, pass through Washington. Its fast express trains are vesti-

buled from end to end and heated with steam. Pullman's latest and best productions in the way of sumptuous drawing room sleeping cars are attached to all its through trains. The present management of the B. & O. have made vast improvements in the last two years, and the road is to-day one of the foremost passenger carrying lines in the country. Through tickets via B. & O. R. R. can be procured at all the principal ticket offices throughout the United States.

### Capillusia for the Hair.

Regarding a specific for baldness, have you paid any attention to the claims of A. M. Clark for his "Capillusia" for the hair? Where the hair roots are not totally destroyed he claims that "Capillusia" will in all cases cause the hair to grow. He holds numerous testimonials to its efficacy as a stimulant of budding hairs, and the article is in growing demand by young men anxious to add to the hirsute wealth of their upper lips. Information as to prices, style of package, etc., can be obtained on request to A. M. Clark, 136 Liberty street, New York.

### The Best Families.

If you have not already, please notice that persons buying Humphreys' Specifics are the best people in town—the most desirable customers in every way. It will pay you to cultivate this class of people by keeping on hand a supply of all numbers of Humphreys' Specifics; otherwise you will risk the loss of the most desirable trade.

Also, do not forget Humphrey's witch hazel oil. It is said to be one of the "best sellers" now on the market. Ask the Humphreys Company, New York City, for advertising matter, which will be sent free, if this paper is mentioned when writing them.

### Fly Time is Coming.

Last year the O. & W. Thum Co. extensively advertised their Tanglefoot Holder by putting two free into each box; over two million were thus distributed.

The inquiries lately made show that they were appreciated by a great majority of the dealers and their customers, and that their popularity has deservedly increased. The object being accomplished, the company will, as in former years, continue to pack only one with each box for the dealer's own use or for him to present to some good customer.

Extra holders can be obtained through the jobber.

### Puffer & Son's Chicago Branch.

We are in receipt of the following communication from A. D. Puffer & Sons, the widely-known makers of "Frigid Soda Apparatus," of Boston, New York and Chicago:

A. D. PUFFER & SONS,  
264 Fifth avenue,  
Chicago, Ill.

We take pleasure in announcing to our patrons and the trade that we have leased the premises at the above address, where our representative will be glad to meet all intending purchasers of marble soda water apparatus or machinery for manufacturing and bottling carbonated beverages. We call attention particularly to

our display of onyx marble apparatus; chaste in design, they are also unrivaled for durability and thoroughness of construction. Buyers will find goods ranging in prices suitable to the wants of all, and any inquiries regarding same will receive prompt attention.

Note our address:

A. D. PUFFER & SONS,  
264 Fifth Avenue,  
Chicago, Ill.

## NOTES ON PRICES.

### ADVANCES IN QUININE AND MORPHINE.

Rosengarten & Sons, manufacturing chemists of Philadelphia, in a circular under date of January 31, 1894, announce the advance in price of QUININE SULPHATE by 50 ounces or more, to

34 7/8 c.	per ounce, including 1 oz. vials.
32 1/2 "	" " " 1 oz. cans.
30 1/2 "	" " " 5 oz. cans.
29 1/2 "	" " " 5 oz. air-tight pkgs.
28 1/2 "	" " " 25 oz. cans.
28 "	" " " 50 oz. cans.
27 1/2 "	" " " 100 oz. cans.

and for ACETATE, MURIATE and SULPHATE of MORPHINE, by 25 ounces or more, to \$2.40 per ounce, including 1/2 oz. vials in 1 oz. boxes.

2.35	" " 1/2 oz. vials in 1/2 oz. "
2.15	" " 1 oz. vials.
2.10	" " in bulk.

### CHEMICALS.

The Roessler & Hasslacher Chemical Co., manufacturing and importing chemists, of 73 Pine street, New York, issue their monthly prices current under date of February 1. Referring to the business situation they state that the year has made a satisfactory beginning; orders are coming in more freely and everything indicates a further favorable progress. The improvement is most evident in values which in the more important staples show a steady advance to a more remunerative basis, stimulating the demand and encouraging buying, beyond the limits of "hand to mouth." Continuing they say: We have advances to report in chloral hydrate, benzoic and oxalic acids, in sal ammonia and sulphate of quinine. A review of our whole list shows only a few exceptions, such as acetanilid, which continues to sell at exceedingly unsatisfactory prices, and of aniline oils and salts, which, despite a growing consumptive demand, are still being offered at extremely low prices with no visible signs of betterment. Benzoic acid, ex-Toluol, is higher. Chloral hydrate we advance by 15 cents per pound, so that, in bulk, crystals change to \$1.25 and crusts to \$1.20 per pound. We solicit your orders at these prices, our terms and conditions remain unchanged. Oxalic acid continues firmer, and manufacturers exhibit little disposition to sell unless at full prices. Permanganate of potash: We invite your inquiries and always meet competing prices for our exceptionally fine quality. Sal ammonia has advanced further, and we have only limited quantities of our "prime white" quality, Kunheim & Co.'s make, to offer. The "Grey" is also higher. Sulphate of quinine, Gold and Silver brand: We to-day advance our price 2 1/2 cents per ounce and now hold for prompt delivery and for contracts extending over sixty days as follows:

In 100 ounce tins, to 25 cents per ounce.	
" 50 "	" " 25 1/2 "
" 25 "	" " 26 "
" 5 "	" " 27 "
" 1 "	" " 30 "
" 1 " vials,	" " 32 "

Terms f. o. b. New York, net 30 days, less 1 per cent. for cash within ten days.

### Glacial Acetic Acid.

Fritzsche Brothers, New York, branch of Schimmel & Co., Leipzig & Prague, call attention in a circular, under date of February 1, to the fact that they are now prepared to furnish a perfectly pure glacial acetic acid (*Acidum Aceticum Glaciale U. S. P.*), of their own manufacture. The acid is perfectly indifferent towards potassium permanganate, and in all other respects meets the highest requirements for purity mentioned in the U. S. Pharmacopoeia. They state that they can confidently recommend it for all purposes, medicinal or otherwise, where a strictly pure acetic acid is required.

## Review of the Wholesale Market.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

NEW YORK, February 7, 1894.

The new month has opened well, the trade volume being regarded as in excess of corresponding periods, previous years. A certain amount of caution is yet displayed by interior dealers in ordering supplies, which serves to check speculation somewhat and gives the general market a tame appearance, but the situation is encouraging to jobbers and importers, and a general strengthening of values is confidently anticipated soon. Prices are maintained with a fair show of steadiness. Opium remains quiet. Quinine is held in firm position at an advance. Strychnine is easier. Chloral hydrate is higher. Glycerin is easy. Messina essences are weak.

### DRUGS.

ALCOHOL, grain, continues held as before with about the usual consumptive demand. Wood has attracted general attention during the week, owing to the strong efforts of the principal producers to suppress outside competition. For the purpose of making the production still more unprofitable to the opposition prices have been considerably lowered and now stand at 80c. for 95 per cent., 85c. for 97 per cent., \$1.35 for alcoholene, and \$1.50 for Columbian spirit. The terms are 30 days with a discount of 1 per cent. cash 10 days for goods f. o. b.

ACETANILID has met with fair attention of late for medicinal and manufacturing purposes. Bulk has sold at 32 1/2 @ 34c.

ARNICA FLOWERS continue in moderate request with further parcels taken up within the range of 10 @ 11c.

BALSAMS.—Copaiba is steady at the quoted range. Fir continues in moderate request but the available stock is small and holders are not anxious sellers. Canada does not offer below \$3.75, while Oregon is jobbing fairly at 80 @ 85c. according to quantity. Tolu from jobbers' hands is generally held at \$1.40 @ \$1.50, and a fair business is reported.

BARKS.—Cascara Sagrada is inquired for, but holders' quotations in most instances exceed those of buyers. The range of the market is 5 @ 6c. as to quality and quantity. Soap in a quantity way may be obtained at 3 1/2 c., and for forward delivery down to 3c. is quoted. Important inquiry is suspended.

BUCHU LEAVES, Short, are in moderate request with jobbing sales at 10 @ 12c. as to quality.

CANTHARIDES continue inquired for and a firm feeling seems to prevail among holders. Chinese are yet quoted 28 @ 30c. and Russian 70 @ 75c.

CASSIA BUDS are selling moderately at the quoted range of 18 1/2 @ 19c.

CHORAL HYDRATE has been advanced 15c. per lb. by the manufacturers. The new quotations are crystals in bulk, \$1.25; pound, \$1.35; half do., \$1.45; quarter do., \$1.55; ounces, \$2.50; crusts in bulk, \$1.20; pounds, \$1.30; half do., \$1.40; quarter do., \$1.50, and ounces, \$2.45. For lots of 100 lbs. or over 5 cents less than above would be acceptable.

CINCHONA, Simaruba, has been received to the extent of 5 bales; single packages are quoted 24c.

COCAINE MURIATE has been advanced 30c. per ounce by the manufacturers, and the figures are now regarded as uniform, ounce vials quoted \$5.20; half do., \$5.25; quarter do., \$5.30, and eighth do., \$5.40. 20 per cent. less can be done on lots of 100 ounces.

CACAO BUTTER, foreign, has been in better demand, and we are reported sales aggregating 8,000 lbs. at 32c.

COD LIVER OIL, Norwegian, is selling quite actively and commands full prices, say \$19.25 @ \$22, as to quality.

CUBEB BERRIES continue in fair jobbing request. Of XX we are reported a sale of 1,000 lbs. at 11c.

EGGOT develops no new feature of consequence, either as regards price or demand. The arrivals of Spanish goods in London have been heavy of late and should contribute to an easier market, though the situation here is regarded as firm for both varieties.

GLYCERIN has been in competitive demand during the interval and the market is somewhat unsettled in consequence. Drums can purchase down to 12c. and cases 13c.

JABORANDI LEAVES have sold from importers' hands at 20c., but 25c., we understand, is now inside, but up to a jobbing way 35c. is wanted.

LYCOPodium is meeting with moderate jobbing demand at 56c. for regular brand and 50c. for Collitz.

MORPHINE has been advanced by the leading domestic makers. The new quotations are \$2.10 in bulk to \$2.15 in ounces and \$2.45 in eighths.

OPIMUM continues in strong statistical position and holders are not disposed to lower their selling limits. All the indications at present point to an appreciation in value. Most holders are quoting \$2.65 @ \$2.70 for cases. In a jobbing way there is a steady moderate distribution at \$2.70 @ \$2.75; for powdered the range continues \$3.20 @ \$3.40.

QUININE has sold moderately well in a jobbing way to the trade with a fair amount of speculative inquiry noted. The tendency of the market, however, is regarded as upward, and those outside who hold stock in quantities are inclined to reserve in their offerings, uncertain of their ability to obtain additional goods when their present supply is exhausted. From second hands 23 1/2 c. cash or 23 3/4 @ 24c. regular terms is required for foreign brands, while from manufacturers' agents 25c. is the quotation named and this only to those who have a legitimate outlet to consumptive channels. The price of domestic from makers' hands remains 27 1/2 c. for large bulk.

SAFFRON, American, has hardened in the interval and is now quoted steady at 40 @ 42c., the inside price for full packages.

SENNA LEAVES are selling moderately, natural Alexandria realizing 18 @ 25c. and Tinnivelly 6 @ 18c.

STRYCHNINE has declined to \$1.15 for crystals in eighths in lots of 100 ounces.

VANILLA BEANS have sold to the extent of some 300 lbs. within the range of our quotations.

WAX, Japan, has been selling freely during the week at 8c.

#### DYESTUFFS.

CUTCH continues in steady moderate request with the current sales at 5½ @ 6c. as to quantity for desirable grades SM and 5½ @ 5½ for HT.

DIVI DIVI is quoted nominally at 55 @ 65c. with the market quiet.

GAMBIER is in firm position and the prices are well sustained on the basis of 4½ @ 4¼c. for quantities. Goods to arrive ex-Wandering Jew are held at nominally 4½c.

NUTGALLS, blue Aleppo, are selling in a small way at the range of 13½ @ 14¼c.

SUMAC is meeting with a fair jobbing inquiry with Sicily bringing \$72.50 @ \$80 as to brand and quantity.

#### CHEMICALS.

ARSENIC, white, is scarce and firm at 3½ @ 3¾c. as to brand. Saxony, red, is also in small supply, and held at 6½c.

BLEACHING POWDER is without important change. The small quantity at present in stock is being distributed at 2¼c. for German, and 2½c. for English.

BLUE VITRIOL remains quiet but steady at 2½ @ 2¾c.

BENZOIC ACID is firmer, with German bulk quoted 50 @ 52c.

CITRIC ACID has declined in the interval, manufacturers now quoting bbls. at 42½c. and kegs 43c.

CHLORATE OF POTASH is without new feature of note, the outside stock is offered and selling in a jobbing way at 14¼c. for German and 14½c. for English crystals.

CREAM OF TARTAR is in limited inquiry. Small sales of crystals are reported at 17½c. and powdered at 17½ @ 18c.

BROMIDE SALTS have advanced abroad and the market here is stronger in consequence, no quotable changes, however, are announced.

NITRATE OF BARYTA has sold during the week to the extent of 1,000 lbs. on private terms.

NITRATE OF SODA is quiet at present, but holders are not disposed to urge business below the point of \$1.95.

OXALIC ACID is well sustained at 6¼ @ 7c. for German and English.

TARTARIC ACID is dull at nominally 21¼c. for crystals and powdered.

#### ESSENTIAL OILS.

ANISE is generally held at \$1.45 though occasional sales are reported \$1.42½.

CAJAPUT in a jobbing way is selling at 35 @ 45c. as to quality.

CASSIA is well sustained at 80 @ 85c. with a fair distributed trade upon this basis.

CUBEB is dull and prices are irregular. The market is variously quoted at \$1.50 @ \$1.70.

LEMON continues weak and unsettled with 95 @ \$1.50 quoted as to quality. The great fall in the value of Sicilian essences generally is commented upon by the special correspondent of the *Chemist and Druggist* at that point. To the bad state of trade all over the world, in particular in America and England, he attributes the lessening demand for perfumery products. The recent insurrection in Sicily has effected the production of oil, but every branch of Sicilian trade has been equally affected. The market here is still unsettled.

PENNYROYAL continues to offer at 90c. @ \$1.00, but trade requirements momentarily are unlimited.

PEPPERMINT is maintained in rather unsteady position though current sales are of a small and unimportant character. Bulk is held at \$2.45 @ \$2.60 as to quality and HGH \$2.90 @ \$2.95.

WINTERGREEN is in moderate request and firm at \$1.40 @ \$1.50 for natural oil.

#### GUMS.

ALOES are held as before with a moderate demand for consumption.

ASAFETIDA is in moderate consumptive demand with prices well sustained owing to limited stock.

CAMPOR is easier with a dull market ruling. Bbls. and cases are now quoted by manufacturers at 44 @ 45c. and 45 @ 46c. respectively.

CHICLE is urged with more show of freedom by importers, but important inquiry is still lacking, the article being slow of sale at 27½ @ 28c. Some holders ask up to 29c.

GAMBOGE yet offers at 52 @ 54c., the fair inquiry for jobbing parcels.

GEDDA is steady at 22c. with sales making at 22 @ 24c.

GUAIAC and Kino are without important change either as regards price or demand.

SENEGAL and Arabic are selling somewhat better in a jobbing way and at generally steady prices. Sorts quoted respectively 9 @ 9½c. and 10 @ 12c.

SHELLAC is well sustained at full recent quotations, but there is still an absence of speculative inquiry noted. DC is quoted at 35c.; VSO, 32 @ 33c.; TN, 25½ @ 27c., and other brands in proportion.

TRAGACANTH is inquired for to a moderate extent, and the market is quoted firm at 32 @ 56c. for Aleppo, as to quality, with sales reported at this range.

#### ROOTS.

ACONITE, German, remains quiet but steady at 9 @ 14c.

ALTHEA, cut, is selling in a moderate way at 15 @ 18c.

CALUMBA of the common grades is now obtainable down to 5½c.

GOLDEN SEAL is meeting with increased attention, and among sales reported are 500 lbs. for export on private terms. We quote 21½ @ 23c.

GINSENG is in moderate request with the current sales at 3½ @ 4c. as to quality.

GINGER, Jamaica, is in light supply and firm upon the basis of 14 @ 17c. for unbleached as to quality.

IPBCAC is selling in a small way at \$1.25 @ \$1.40 as to quality.

JALAP is dull but steady at 23 @ 27c.

LOVAGE may yet be obtained at the range of 30 @ 35c., but the spot stock is small and foreign cables indicate a rising tendency to the market in Hamburg.

MANACA is held at \$1.25, which is an inside price for a small available supply.

PINK is in fair inquiry with holders quoting 22 @ 30c. as to quality.

SARSAPARILLA, Mexican, is held with increased firmness now that the stock is under control. Jobbing parcels command 9½c.

SENEGA, Manitoba, has been offered down to 39c. and we are reported a sale of 500 lbs. at this figure.

#### SEEDS.

ANISE in a jobbing way continues to realize 10 @ 10½c. for Italian sifted and 6 @ 6¼c. for German.

CANARY continues to find sale in a jobbing way at 2½ @ 2¾c.

CARAWAY, Dutch, is maintained at 7c. and jobbing sales are reported at this price.

CELERY can yet be obtained at 15c., though the principal holders decline to shade 16c., and some ask even a higher value.

FENUGREEK is scarce and firm at 3c.

FENNEL is jobbing at 10½ @ 11c. for German, and 6½ @ 7c. for Italian.

MUSTARD, yellow, Californian, continues very dull, though there is no stock offered upon the market below the point of 3¾c.

RAPE, German, is selling in moderate quantities to the trade at 2¾ @ 2¾c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED first-class salesmen to sell a side line on commission; only those selling to first class trade need apply; state the line of goods now carried; samples small. Address H. T. C., care this office.

#### POSITIONS WANTED.

WANTED SITUATION by a young man 18 years of age, 3½ years' experience, in a drug store of New York City with college privileges; can furnish good reference. Address Henry Brown, care Lorenz & Koempel, Scranton, Pa.

POSITION WANTED—A salesman acquainted with wholesale and retail druggists to introduce some goods on small salary or commission. "Mueller," 130 Forsyth street, N. Y.

SALESMAN wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

SITUATION WANTED as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

WANTED.—Position by young man aged 18 to learn the drug business; industrious and willing to work; can furnish good references. Address W. H. Doolittle, Jr., 557A Monroe street, Brooklyn.

WANTED, SITUATION.—A practical and competent pharmacist, first-class worker, neat, sober and reliable, registered in Connecticut; best references. Address "C. A. P.," this office.

#### BUSINESS OPPORTUNITIES.

TO DISSOLVE PARTNERSHIP.—A first-class drug store is offered for sale in a growing city. For particulars address P. O. Box 1315, Meriden, Conn.—4.

FOR SALE.—Well established and profitable patent medicine business. Present proprietor wishes to retire from active business for family reasons. Address A. P. Hoxsie, Buffalo, N. Y.

DRUG STORE for sale in fast growing village in Long Island; south side; population 700; yearly business \$2,500; price if sold before Spring \$1,000; owner has another store; first-class opportunity for young doctor, single. "Ozone," this office.

THE SUBSCRIBER wishes to buy a drug store having a daily trade of \$18 or over, in a town of 8,000 or more. Rent to be not above \$40 per month, and price to run between \$3,000 and \$4,500. Location anywhere west and south of New York City. Address "Class of '93," care of this office.

I HAVE in my possession 47 numbers of THE PHARMACEUTICAL RECORDS which I wish to dispose of for fair prices, or in exchange for something. I have also about 22 numbers of *Druggists' Circulars* in good condition. Write and state price, or exchange, to "Bensonhurst," in care of this office.

FOR SALE.—One of the oldest, best located and prosperous retail drug stores in Los Angeles, Cal.; no cutting; a city rapidly growing and located in an unexcelled climate and populous territory; a rare business opportunity; owner desirous retiring from active business. Address H. K. Stockton, P. O. Box 356, Station C, Los Angeles, Cal.



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Acetanilid, bulk, per lb.	.38	②	.34
" lbs... per lb.	...	②	.58
" ozs... per oz.	...	②	.06%
Acetate of lime:			
Brown, per 100 lb....	.90	②	.95
Gray, per lb.....	.01%	②	.01%
Acids:			
Acetic Com'l, pr lb..	.01%	②	.02
Aquafortis, 36 deg... 40 .....	.03% .05%	② ②	.03% .04%
Benzoic, German....	.50	②	.52
English....	.09	②	.09%
Boracic, Whole.....	.12%	②	.12%
Powdered.....	.13	②	.13%
Citric, American....	.42%	②	.43
English.....	.43	②	...
Carbolic Crystals....			
bulk.....	.14%	②	.16
lb. bottle.....	.10	②	.21
Muriatic, 96.25 deg. Nitrlic, 38 degrees... 40 .....	.90 .03% .04	② ② ②	1.37% .04% .04%
Oxalic, English.....	.07%	②	.07%
German.....	.07	②	.07%
Picric.....	.23	②	.30
Salicylic.....	1.12	②	1.22
Sulphuric.....	...	②	1.25
Tartaric Crystals....	.25	②	...
Powdered.....	.25%	②	...
Tannic.....	1.05	②	1.20
Alcohol, Grain, per gal. (wood rebate).	2.24	②	2.28
Coal, 95° 97%.....	.80	②	.85
Alcholene.....	...	②	1.35
Aloin, per lb.....	1.00	②	1.10
Alum, Lump, per lb....	...	②	1.75
Ground, per 100 lb... Antifebrile, per oz.... Antipyrine, per oz....	... ... 1.25	② ② ②	1.80 ... 1.40
Arrow root, Berm. lb.. St. Vincent, in bbl., lb.	.24 .21	② ②	.25 ...
Aniline:			
Red Saxon, lb.....	.06	②	.06%
White.....	.03%	②	.03%
Balsam Copoba, lb....	.33	②	.40%
Fir, Canada, gal.....	3.35	②	...
Fir, Oregon, gal.....	.80	②	.85
Peppr, lb.....	1.40	②	1.50
Tolu, lb.....	.86	②	.87
Bark, Buckthorn, per lb. Casaca Sagrada, lb.. Eim, lb..... Orange peel..... Sassafras, per lb.... Soap, lb.....	.27 .05 1.26% .06 .06% .03%	② ② ② ② ② ②	.29 .06 .19 .07 .07 .04%
Bicar. Soda, Engl., lb. domestic, lb.....	.03% 3.00	② ②	.03% 3.15
Bichromate, Pot'h, lb. Bismuth, Sub. Nit., per lb., bulk.....	.10% 1.95	② ②	.11 2.00
Bismuth, Sub. Carb., per lb., bulk.....	.25 2.25	② ②	.25 2.30
Blanch'g Powd., per lb. Blue Vitriol, lb.....	.08 .03%	② ②	.08% .03%
Borax, refined, lb.....	.07%	②	.08%
Concentrated, lb.....	.07%	②	.08
Brimstone, best sd, ton Bromide Potash, dom- estic, b'l'b, lb.....	19.50 .37	② ②	20.00 .38
bottles, lb'k.....	.45	②	.46
Bromide Ammonium, bulk.....	.45	②	.46
Bromide Sodium, b'l'k.. Bromine, bulk.....	.42 .43	② ②	.43 .45
Burgundy pitch, per lb. Cacao Butter: 1-lb. boxes, lb..... Dutch A., per lb.....	.08% .22% 33%	② ② ②	.08% .24 34%
Caffeine.....	8.40	②	8.50
Campbor, red'd, bbls, lb. cases, lb.....	.44 .45	② ②	.45 .46
Cantharides, Chinese, lb. Russian, lb.....	.28 .70	② ②	.30 .75
Carb. Ammonia.....			
cases, lb.....	.08	②	.08%
Cassia Buda, lb.....	.18%	②	.19
Castor Oil, cases, lb.... Barrel, lb.....	.15 .14%	② ②	.15% .15
Caustic Soda, as to test Chalk, Engl. Precip., bulk, lb.....	2.85 .04	② ②	3.25 .06
Chloral Hydrate Cry- stals, bulk, per lb.... Hydrate crusta, bulk, per lb.....	1.20 1.05	② ②	1.25 1.20
Chlorate Pot. Crys., lb. Pow'd, lb.....	.14% .15	② ②	.15 .15%
Chloroform, Bulk, lb.. Chenochidine, Sulphate of, German, oz.....	.50 .08	② ②	.55 .08%
Citrate, U.S.P. Iron, lb. Soluble.....	...	②	.50 .55
Iron and Ammonia, lb. Iron and quinine..... Iron and strychnine.. Phosphate, U.S.P. lb. Pyrophos., U.S.P., lb. Fvrosol, Soluble, lb.	1.50 2.00 2.00 ... ... ...	② ② ② ② ② ②	1.55 2.05 2.05 ... ... .55

Citrates, Potash, per lb.	... ②	.49
Soda, per lb.....	... ②	.49
Cobalt, pow d, lb.....	.50 ②	.58
ocaine Murate, per oz.	5.20 ②	5.40
Codine bulk, oz.....	4.00 ②	4.25
Codine, eights.....	4.65 ②	...
Cod Liver Oil, Nor-		
wegian, bbls.....	xg.25 ②	\$2.00
Newfoundland .....	10.35 ②	.70
Colocyath:		
Trieste, lb.....	.27 ②	.33
Spanish.....	.20 ②	.24
Copperas, per 100 lb....	.50 ②	.80
Cr. Tartar, Crystals, lb	.18 ②	.18½
Powdered, lb.....	.18½ ②	.18½
Cubeb Berries Z.A., lb.	.17 ②	.20
Ordinary, lb.....	.14 ②	.16
Cutch, bales, S.M., lb..	.05½ ②	.06
Cutch, boxes lb.....	.08½ ②	.06
Cuttle bone, Trieste, lb	.10 ②	.11½
Jewellers' lb.....	.35 ②	...
Dextrose.....	.04½ ②	.05
Divi Divi, per ton.....	55.00 ②	65.00
Dragon's B'd, lump, lb	... ②	...
In reeds, lb.....	.45 ②	.50
Epsom Salts, per 100 lb.	1.10 ②	1.20
Ergot:		
G'm'n and Russ'n, lb	.24 ②	.28
Spanish, lb.....	.18 ②	.24
Ergotine, Domestic....	... ②	4.00
German.....	4.00 ②	...
Flowers:		
Arnica Flowers, per lb	.10 ②	.21
Chamomile.....		
German, New, lb..	.17 ②	.24
Roman, New.....	.10 ②	.18
Lavender, Ordinary,		
per lb.....	.04 ②	.08
Select, per lb.....	.15 ②	.65
Gambier, lb.....	.04½ ②	.04
Glycerin, bbls, lb.....	... ②	.13
casea, lb.....	.13½ ②	.15½
Grains, Paradise, lb....	.06½ ②	...
Guarana, lb.....	1.00 ②	1.05
Gums:		
Aloes, Cape, lb.....	.05½ ②	.06
Curacao, lb....	.02½ ②	.03
Socotrine, lb....	.30 ②	.40
Arabic ist picked.....	.47½ ②	.52½
sd .....	.34 ②	.36
Arabic, sorts.....	.10 ②	.12½
Anafordia, lb.....	.15 ②	.30
Benzoin, lb.....	.28 ②	.40
Chicle, lb.....	.27½ ②	.28
Gamboge, lb.....	.53 ②	.54
Guaiac, lb.....	.17 ②	.28
Kino, lb.....	.75 ②	.80
Mastic, lb.....	.57 ②	.70
Myrrh, lb.....	.20 ②	.38
Sandrac, lb.....	.29 ②	.30
Senegal, picked, lb....	.15 ②	.45
sorts, lb.....	.09 ②	.09½
Shellac, DC, lb.....	... ②	.34
VSO, lb.....	.32 ②	.33
Diam'd I, lb.....	.30½ ②	.31
SS, lb.....	.30 ②	...
TN, lb.....	.25½ ②	.27
Garnet.....	... ②	.25
Bleached, lb.....	.30 ②	.31
Tragacanth, Aleppo, lb.	.32 ②	.56
Turkey.....	.48 ②	.75
Indigo, lb.....	.45 ②	1.05
Insect Flowers.....	.14 ②	.25
Insect Powder, pure, lb.	.16 ②	.22
Iodide Potash, bulk, lb.	2.75 ②	2.80
bot's, lb.....	2.83 ②	2.88
Iringlass, Am'r'n, lb..	.47½ ②	.60
Japan, lb.....	.35 ②	...
Juniper Berries, lb.....	.02½ ②	.03
Leaves:		
Belladonna, per .lb	.00½ ②	.11
Buchu, short, lb....	.12 ②	.14
long, lb.....	.25 ②	...
Coca, prime, lb.....	.13 ②	.20
Damiana, lb.....	.11 ②	.15
Hyoscyamus.....	.07 ②	.08
Jaborandi, lb.....	.25 ②	.35
Rosa, red, lb.....	.53 ②	.54
Senna Alex natrl, lb..	.18 ②	.25
Senna Tinney, lb....	.06 ②	.18
Stramonium.....	.02½ ②	.08
Licorice, M. & R., lb..	.24 ②	...
Lupulin, German.....	.45 ②	1.75
Lycopodium, lb.....	.57 ②	.80
Manna, large flake, lb..	.28 ②	.39
Small flake, lb.....	.30 ②	.33
Menthol, Japanese.....	... ②	6.00
Mercurials:		
Blue Pill, lb.....	.31 ②	.38
Calomel, lb.....	.68 ②	...
Cor. Sublimate, lb..	.59 ②	...
Mercury and Chalk..	.20 ②	...
Ointment, lb.....	.26 ②	.37
Red Precipitate, lb.	.78 ②	...
White     "lt.....	.83 ②	...
Morphine, bulk, ex.....	2.10 ②	2.25
Eighty, oz.....	2.31 ②	2.42
Moss, Irish, lb.....	.06 ②	.06
Irish, bleached, lb....	.13 ②	.15
Muriate Potash, per 100		
lb.....	1.76 ②	1.80

Naphthaline, flake, per lb.	...	0	03½
Naphthaline, Ball, per lb.	...	0	04½
Nitrate Silver, oz.	1.45	0	.47
Nitrate Soda, 100 lb.	1.95	0	3.60
Nux Vomica, lb.	...	0	.04
Nutgalla, China, per lb.	.13	0	.13½
Aleppo, per lb.	.13½	0	.14½
Oils, Essential:			
Anise.	1.45	0	1.50
Almonds, Sweet.	4.50	0	7.50
Bay, per lb.	3.50	0	4.00
Bergamot.	1.75	0	.25
Calicut, Native.	.35	0	.45
Camphor.	.07	0	.08
Caranella.	.85	0	.90
Citronella, Native.	.27	0	.05
Clove.	.50	0	.53
Copaiba.	.70	0	.80
Croton.	.80	0	.85
Cube.	1.50	0	1.70
Gerani.	4.50	0	7.50
Lavender.	.40	0	.25
" German.	.40	0	.30
Lemon, as to brand.	.85	0	1.50
Lemongrass.	.80	0	.85
Musk, per lb.	7.00	0	8.00
Myrbane.	.17	0	.19½
Neroli.	.25.00	0	35.00
Nutmeg.	.80	0	.75
Orange, sweet.	1.40	0	1.60
Orange, bitter.	3.25	0	4.00
Origanum.	.80	0	.80
Perryroyal.	.90	0	1.00
Peppermint, bulk.	2.25	0	2.60
" High.	2.25	0	2.05
Rose.	8.00	0	9.00
Sandalwood.	...	0	.25
Sassafras.	.36	0	.40
Sassafras, Artificial.	...	0	.25
Spearmint.	1.60	0	1.80
Tansy.	2.50	0	3.00
Wintergreen.	1.40	0	1.50
" Artificial.	.80	0	.87½
Wormwood.	2.15	0	2.25
Opium, Natural, per lb.	8.70	0	9.75
Opium, Ordinary.	...	0	2.75
Opium, Powd., per lb.	3.00	0	3.40
Phenacetine, per oz.	.85	0	1.00
Prussiate Potash, Yellow, per lb.	.84½	0	.95
Red, per lb.	.48	0	.46
Quicksilver, flasks per lb.	.45	0	.43
Quinine:			
Domestic, bulk, oz.	...	0	.27½
Domestic, oz.	.30	0	.35
German, bulk.	.22	0	.22½
German, oz.	.27½	0	.20
Roots, Aconite, lb.	.11¼	0	.12
Althea, cut, lb.	.16	0	.18
Alkanet, lb.	.06½	0	.07
Arnica, lb.	.12	0	.13
Belladonna Ger., lb.	.09	0	.12
Blood, lb.	.05	0	.06
Calamus, lb.	.07½	0	.08
Calamus, bleac'd, lb.	.12	0	.14
Colchicum, per lb.	.14	0	.18
Colombo, lb.	.05½	0	.11
Dandelion, Germ. lb.	.07½	0	.08
Dogwood, lb.	.08	0	.10
Galangal, lb.	.04½	0	.05
Gentian, lb.	.03½	0	.04
Ginseng, lb.	1.75	0	3.00
Ginger, Jamaica, bled, lb.	.16	0	.18
Ginger, Jamaica, unbled, lb.	.14	0	.17
Golden Seal, lb.	.93	0	.24
Hellebore, powd., lb.	.07½	0	.08
Ipecac, lb.	1.25	0	1.40
Jalap, lb.	.93	0	.27
Kava Kava, lb.	.20	0	.25
Licorice, select, lb.	...	0	.15
" Pc'd., lb.	.17	0	.18
Lovage, lb.	.39	0	.35
Mandrake, lb.	.03½	0	.04
Orris, Florentine, lb.	.90	0	.30
Orris, Verona.	.10	0	.22
Pink, lb.	.24	0	.30
Rhubarb, whole, lb.	.25	0	.26
Sarsaparilla, Hond. lb.	.28	0	.42
Sarsaparilla, Mex. lb.	.08½	0	.10½
Senega, lb.	.30	0	.42
Serpentaria, lb.	.30	0	.35
Valerian, Belgian, lb.	.07	0	.07½
" German, lb.	.10	0	.22
Saffron, Amn., lb.	.40	0	.42
Spanish, Valencia, lb.	5.40	0	6.00
Spanish, Alicante, lb.	...	0	4.50
Sal Ammoniac, lump, lb.	...	0	.09
Do. Granulated, lb.	.06½	0	.06½
Sal Soda, Eng., 100 lb.	.90	0	.95
" American.	.80	0	.85
Saltpeter, crude, per lb.	.93½	0	.04
Saltpeter, Refined, per lb.	.06	0	.08
Seeds, Anise, Ital., lb.	.70	0	.71

Seeds, Anise, German lb.	.06	2	-.06%
Anise, Star, lb.	.19	2	-.20
Canary, Smyrna, lb.	.09	2	-.09%
Canary, Sicily, lb.	.09	2	-.09
Caraway, lb.	.06%	2	-.07
Cardamom, .....	..	..	..
Aleppy, per lb.	.65	2	.80
Cardamon, Malabar, per lb.	.65	2	1.45
Celery, lb.	.16	2	.17
Colchicum, lb.	.12%	2	.13
Coriander, lb.	.05%	2	.06
Cummin, lb.	.09	2	.11
Fennel, Germ., lb.	.10%	2	.11
Flax Meal, per lb.	..	..	.09
Peanutree, lb.	.02%	2	.03
Hemp, Russian, lb.	.02%	2	.03%
Mustard, yel. Cal. lb.	.04	2	-.04%
Mustard, brown, Cal. lb.	.03%	2	-.04%
Poopy, per lb.	.05%	2	-.07
Quince, German, lb.	.85	2	-.35
Rape, German, lb.	.03%	2	-.03%
Rape, English, lb.	.02%	2	-.02%
Soap, Castile, Mar. mottled, pure, lb.	.06	2	-.06%
White, lb.	.09%	2	-.10
Soda Ash, lb., 48% per 100 lb.	1.20	2	1.25
Squills, white, lb.	.04%	2	.06
Sugar Milk, powd., lb.	.10%	2	.14
Sugar Lead, white, lb.	.11	2	.11%
Lead, brown, lb.	.05%	2	.06
Sulphate Ammonia, per 100 lb.	2.90	2	3.00
Do, Potash, 48% per lb.	1.11%	2	1.15
Do., Potash, 90% per lb.	2.20	2	2.15
Sulphur, Roll.	..	..	.01%
Flour.	..	..	.01%
Spirits Nitre, U. S. P.	.39	2	.40
Spirit Ammonia, Arom.	.44	2	.45
Sulphuric Ether.	.54	2	.61
Sumac, Sicily, ton.	75.00	2	80.00
Virginia.	47.50	2	49.00
Tar Barbadoese, gal.	..	..	.45
Tin Crystals, bble, per lb.	.13%	2	..
Jars, per lb.	.15%	2	..
Tonka Beans, Angost., lb.	1.70	2	1.85
Tonka Beans, Para, lb.	.45	2	.60
Agrostura.	1.85	2	1.90
Turpentine, Spirits.	.30	2	.30%
Vanilla Beans, lb.	6.50	2	13.00
cut, lb.	4.50	2	5.25
Venice Turpentine, barrels, lb.	.18	2	.19
Cans, lb.	.10	2	.20
Wax, Brazil, Veg., lb.	..	..	.83
Japan, lb.	.08	2	.08%
Zinc Oxide.	.30	2	.48

Linseed, raw, gal.....	...	2	50
"    boiled, gal.....	...	2	53
Lard, City, Prime, present make, gal.....	..70	0	78
City, Extra No. 1, gal	...	0	53
City, No. 1, gal.....	...	0	45
West, prime, gal....	..70	0	...
Cotton-seed, Prime, Crude, gal.....	..30	0	31
Summer Yellow, prime, gal.....	..34½	0	35½
Summer Yellow, off grades.....	..33½	0	34½
Winter Yellow, gal..	..40	0	42
Prime White, gal....	..34	0	40
Sperm, Crude, gal.....	..63	0	65
Natural Spring gal..	..68	0	70
Bleached Spring gal.	..68	0	70
Natural Winter, gal.	..71	0	73
Bleached Winter, gal.	..73	0	75
Whale, Natural Winter, gal.....	..44	0	45
Bleached Winter, gal.	...	0	49
Ex. B'f'ch'd, gal.....	...	0	49
Meshaden, Crude, Sound, gal.....	..32	0	33
Dark, pressed, gal..	..34	0	35
Light, pressed, gal..	..36	0	38
Bleached, Winter, gal.	..41	0	42
Extra Bleached, gal.	..44	0	...
Tallow, City, prime gal.	..48	0	50
Cocoanut, Ceylon, lb..	..05½	0	06
Cochin, lb.....	..06	0	06½
Cod, Domestic, gal....	..38	0	40
Foreign, gal.....	..42	0	45
Red Elaine, gal.....	..30	0	40
Saponified, lb.....	..05	0	05½
Bank, gal.....	..35	0	...
Straits, gal.....	..36	0	...
Olive oil, table, in tins	..50	0	1-85
Com'n, bble, gal....	..58	0	60
Neatsfoot, prime, gal.	..60	0	63
Palm, prime Lagos, lb.	..05½	0	06

# American Druggist and Pharmaceutical Record.

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#### FORGED DRUG ORDERS.

THE forger of drug orders has been putting in a little work in this city again, the victims this time being LEHN & FINK and BRUEN BROS. & RITCHEY. In both cases, which occurred a few days apart, the same name, that of STEPHEN H. MILLS & Co., was forged to the order, though in one instance it was signed "per Wheeler" and in the other "per Barrett." In each case one gross of BENSON'S Capsine plasters was ordered. The order to LEHN & FINK read as follows:

NEW YORK,  
Dec. 30, 1893.

Messrs. Lehn & Fink.

GENTLEMEN:

Please deliver to bearer with bill 1 Gross Benson's Capsine Porous Plasters, & oblige

Yours, &c.,  
STEPHEN H. MILLS & Co.,  
per Wheeler.

STEPHEN H. MILLS & Co., of 77 South street, this city, are a firm rated at \$75,000 with A1 credit by the commercial agencies, and there was, therefore, no hesitancy in filling the orders. The only feature about the orders calculated to arouse suspicion was that they were written upon plain paper and not upon printed blanks or letter heads. While it is the general custom among the jobbing drug trade to use printed order blanks, the retail trade and even some jobbing

houses are less careful, occasionally using the merest scraps of paper for writing their orders on.

The appearance of the bearer of the order was such as to rather impart confidence than arouse suspicion. He is described as being about five feet nine inches in height, rather heavily built, with dark slightly gray hair and mustache and apparently about forty years old. There was no particularly noticeable peculiarity about either his speech or appearance.

The transaction may prove valuable as directing attention to the necessity of great care in such matters. Many jobbers make it a rule not to deliver any goods on orders unless the parties can in some way be identified. While this may occasionally prove inconvenient it, is on the whole, the only safe plan.

As to the particular offender in this case inquiry among the trade revealed the fact that STEPHEN H. MILLS & Co.'s name had been used in a similar way with an order for ALLOOCK'S plasters, which was presented to W. H. SCHIEFFELIN & Co. some years ago, though the description of the bearer of the order at that time scarcely agrees with that given by the city clerk of Messrs. LEHN & FINK. If this should be again tried it would be the duty of any one to whom such application was made to hold the bearer of the order and turn him over to the police to be made an example of.

#### "WORKING THE DOCTORS."

THE well-known indifference of the manufacturers of semi-proprietary articles to what may be thought or said about them by retail druggists has prompted a contemporary to an attempted expose of their methods under the suggestive heading "Working the Doctors." "What is generally understood by this," according to our contemporary, "is that they employ salesmen to visit physicians, to give them samples and to explain the wonderful scientific combination of the preparation, illustrate how it is impossible for an ordinary druggist to manufacture anything like it or even understand the great scientific skill employed in making the compound. They also claim that doctors who are careful about their remedies and wish to have the purest and best preparations must always specify

'Snoozer's Snoozine' in prescribing, otherwise the wicked druggist will prescribe the U. S. P. 'Snoozine,' which will be a sure disappointment to the patient and physician and lead to very unsatisfactory if not untoward results."

No one is better aware than the physician himself of the extent to which this practice of "Working the Doctors" has been carried. In colleges and in clinics where students are supposed to be taught the value of system in prescribing and the beneficial results which follow the administration of official drugs in diseases the makers of these semi-proprietary articles have succeeded in some instances in having their alleged remedial compounds boldly advertised to the students by the teaching faculty. Not content with this some of these enterprising manufacturers go farther and issue pamphlets and books made up of extracts from the text books and other scientific prints of men of authority in the medical profession, the whole being ingenuously interwoven with advertisements of their various compounds. Physicians of repute whose names have been used in this way without authority have naturally objected and the result has been that the daily newspapers have of late contained many reports dealing with the unauthorized use of portraits and signatures of eminent physicians in connection with the advertising of some semi-proprietary compound.

The experience of all men goes to prove that wilful deception is a losing game. Apart from the wretchedness of the policy which dictates methods of this kind there is the utter dishonesty which is part and parcel of the whole fraudulent transaction. The good, old-fashioned method of placing a trustworthy article on the market and pushing it on its merits does not seem to appeal to our modern manufacturers. Profits do not come quickly enough for that, and then it would necessitate securing the favor of the retail trade, and this the manufacturers of semi-proprietary articles say they do not care for. They find it more advantageous to "work the doctors" and through this compel hard-working druggists to stock their numerous compounds. Whether doctors or druggists will long submit to this sort of dictation remains to be told.

## Chemico-Pharmaceutical Notes.

**Malacine** is a salicylic derivative of phenacetine, has the form of small pale yellow crystals, insoluble in water, but soluble in hot alcohol; the mineral acids, even in feeble solution, decompose it into salicylic aldehyde and phenacetine. Dr. A. Jaquet, who studied its therapeutic action, considers it an antirheumatic which is usually well borne and produces no untoward effects.—*Semaine Medicale*, through *Am. Jour. Phar.*

**Galloparatoluide** was obtained by M. Cazeneuve in the form of small crystalline plates, fusing at 211°, slightly soluble in cold water, but very soluble in boiling water, alcohol and ether. Hydrochloric acid decomposes it into gallic acid and paratoluidine; protected from the air the caustic alkalis do not attack it even at the boiling point, but in contact with air they gradually transform it by oxidation.—*Comp. rend.*

**Estimation and Separation of Caffeine and Theobromine.**—W. E. Kunze reports in this month's *Zeitschrift f. Anal. Chemie* the following method for the extraction and separation of these two principles of cacao: The material, which need not be deprived of its fat, is thoroughly exhausted with weak sulphuric acid, and the two bodies are precipitated by means of phosphomolybdic acid. The precipitate is treated with baryta water and then with a stream of carbonic acid gas, and the whole is evaporated to dryness. The caffeine and theobromine are then extracted from the dry residue with boiling chloroform. The separation can be effected by means of the silver compound of theobromine.—*Apotheker Zeitung*.

**Synthetic Guaiacol** has been recently prepared by Béhal and Choay. The crystals of pure guaiacol are white and hard; they melt at 28.5° C. (83.3 F.) and boil at 205° C. (401 F.). When melted, the guaiacol remains in fusion for an indefinite time. It is soluble in most of the organic solvents even in benzine; it is also soluble in petroleum ether and crystallizes very well on the evaporation of this solvent. Anhydrous glycerin dissolves crystalline guaiacol in large proportions.

Experiments were first made on animals, and then the remedy was used in phthisical patients in various stages of the disease. The daily doses were of 40 ctg. to 1.2 grammes (8-18 grains), and were given in the form of pearls each containing 0.2 grammes (3 grn.) of the medicament in oily solution, directly before meals.

The stomach is said to tolerate synthetic guaiacol well, as a rule. Large doses sometimes provoke vomiting.

A process for the estimation of iodine in syrup of iodide of iron has been formulated by Gioachino Griggi, based upon the following reaction between potassium chlorate and protiodide of iron:



8 Gm. of the syrup are placed into a test tube, and 2 Cc. of a 5 per cent. solution of potassium chlorate in distilled water added. After heating the mixture until it assumes an ochreous red color, and allowing it to cool, 5 Cc. of pure chloroform are added, the tube is closed, cautiously agitated, and then allowed to rest. The iodine set at liberty is taken up by the layer of chloroform, and imparts to it a beautiful amethyst-violet color. The chloroformic solution is decanted, added to sufficient distilled water, and the iodine is estimated by normal solution of sodium

hyposulphite.—*Boll. chim. pharm., Am. Jour. Phar.*

**Sodium Phosphate Incompatible with Alkaloidal Salts.**—As is known, sodium phosphate (disodic phosphate) has an alkaline reaction on litmus, and according to Dr. Christiens, in the *L'Union Pharmaceutique*, precipitates the alkaloids from their salts just like borax does. In preparing a solution for hypodermatic use, consisting of sodium phosphate, strychnine phosphate, and boiled distilled water, the mixing of the phosphate solutions immediately gave rise to a precipitate, consisting, at first, of a few fine needles, and becoming more abundant on shaking. On examination the precipitate proved to be strychnine alkaloid. On neutralizing carefully with phosphoric acid it was completely redissolved.

Sodium phosphate gave the same precipitate with other alkaloid salts, and is therefore considered an absolute incompatible of alkaloids. If this salt is prescribed in solution with any alkaloid the dispenser should take the precaution to neutralize with phosphoric acid.

The author concludes that all salts of an alkaline reaction to litmus precipitate the bases from alkaloidal salts. This precipitation is the more dangerous the more active the alkaloid and slower the separation is; the reaction may not be noticed by the dispenser, the alkaloid depositing gradually on the bottom of the bottle, and being perhaps all taken with the last doses of the medicine.

**Glycerin**—At the last sitting of the Berlin Pharmaceutical Society a most useful paper on the estimation of the value of commercial glycerin was read by Dr. O. Heller. Briefly, the points were: There are in Germany three commercial grades of this article. 1, lye glycerin; 2, glycerin from acid saponification or distillation glycerin; 3, saponification glycerine, produced by the saponification of fats by means of lime or superheated steam. Lye glycerin is a waste product of the soap manufacturers, and contains a large quantity of impurities. The second variety is produced by the action of strong sulphuric acid on fats at 120° C., and while it is of a better quality than the former variety it has a nasty acid taste. The third variety is the best glycerin, and is prepared by saponification in an autoclave, by means of lime and water under a pressure of nine or ten atmospheres. For the estimation of the glycerin the following method is the best: It depends on the formation of tri-acetin. 1.5 to 2.0 grammes of the commercial glycerine is heated with glacial acetic acid and sodium acetate for about two hours under a reflux condenser, and the excess of acetic acid is neutralized exactly with soda. A measured quantity of soda is now added, the tri-acetin is saponified, the quantity of soda left is determined by titration with standard acid and the amount of glycerin is thus calculated.

**New Reactions for Caffeine and Theobromine**—Tanret (*Rep. de Pharm.*) proposes to employ the double iodide of potassium and mercury and iodine in iodide of potassium solution as reagents for distinguishing these bodies. The former of these is used under many names, and the varieties possess slightly different compositions. The one most suitable for the detection of caffeine is Valser's reagent, containing 14.78 grs. of HgI<sub>2</sub> and 10 grs. of KI to 100 Cc. of water. Some remarkable differences of opinion exist as to the reaction taking place, for Delf urged that the precipitate rapidly becomes crys-

talline, whereas that of the alkaloids is amorphous. Valser and Dragendorff actually hold that caffeine is not precipitated by the reagent at all. The difference is probably due to the fact that these chemists work with different solutions, etc., and with different degrees of acidity, etc. Tanret states that by acidifying with H<sub>2</sub>SO<sub>4</sub> (1 in 10) the precipitate observed by Delf is obtained. This reaction is only sensitive when the solution contains at least 0.15 per cent. of caffeine. Theobromine gives no precipitate with Valser's reagent. The other reagent, iodine in KI, so long as it contains excess of KI (1 gr. of I<sub>2</sub>, 1 gr. of KI, and 50 Cc. of H<sub>2</sub>O) gives a precipitate with caffeine, the color of kermes mineral, in solutions as dilute as 1 in 20,000. With theobromine the precipitate is black, and the reaction is sensitive as far as 1 in 10,000.

**New Reaction of Eserine.**—In 1890, according to the *National Druggist*, Ferreira da Silva announced that eserine is the only alkaloid of the benzeno-ammoniacal group, which, when treated with fuming nitric acid (sp. g. 1.40) and evaporated to dryness, yields a green residue upon the borders of the capsule. In a closer study of this reaction da Silva found that it was marvelously accurate, and that the green residue itself enjoyed some highly interesting properties. In making the test take a fragment of eserine or one of its salts not larger than a little grain of sand (or say 1-100 inch in diameter), place it in a little capsule and dissolve it with a drop or two of fuming nitric acid. The solution will at first be a clear yellow color, but in warming it over the water-bath it passes successively into a deep yellow, orange yellow, and finally into orange. As evaporation progresses, under constant stirring, the residue becomes greenish, until, when finally dryness is reached, the color of the dry material becomes clear green. In this manner the presence of as small a quantity of eserine or its salts as 5 mgm. can easily be determined. This green matter is soluble in water and alcohol, the solutions being green, and non-fluorescent, and on evaporation of the solvent is found unchanged. If we now let fall a drop of nitric acid upon the green matter, on returning the capsule to the water-bath, we shall see the parts not directly touched by the acid become blue, but the whole finally becomes red-violet, which gradually passes into a greenish. If we dilute the acid with water we get a fluorescent solution which by reflected light is blood-red, but by direct or transmitted light is greenish-yellow. Examined with the spectroscope the aqueous solution is characterized by three absorption bands. The first, which is sharpest, is in the red between  $\lambda$  (lambda) 770 and  $\lambda$  (lambda) 688; the second is wider and occupies a place in the indigo between  $\lambda$  (lambda) 400 and  $\lambda$  (lambda) 418; and the third place, which is quite feeble, is in the orange. The alcoholic solution shows the identical bands more clearly characterized. Petit has already described a blue coloring matter derived from eserine physostigmine blue, which is obtained by treating eserine with ammonia. Duquesnel has obtained from the same alkaloid a red coloring matter (*rubreserine*) by treating it with the fixed alkalies. Ferreira da Silva proposes the name of *chloreserine* for the green matter discovered by him.

## ARTIFICIAL CARLSBAD SALT.

[B. & C. Druggist.]

Dried sulphate of sodium.....	46 parts
Dried bicarbonate of sodium.....	45 parts
Chloride of sodium.....	20 parts
Sulphate of potassium.....	3 parts

## On the Essential Oil of Lemon.

By R. S. LADELL.

Many plants contain oily substances to which they owe their peculiar odor, and these can be obtained from them by distillation with steam. Many of the so-called essential oils contain terpenes or hydrocarbons represented by the formula  $C_{10}H_{16}$ ; and it has been stated that the terpenes are often the chief constituents of the essential oils, as in the case of lemon and orange oils, etc. But it should not be forgotten that the oils of lemon and orange, as well as other essential oils, may be obtained entirely devoid of terpenes.

Geissler (*Pharmaceutische Centralhalle* 1881) has described the terpeneless oil of lemon, and shown that it excels the commercial oil of lemon in odor, flavor, stability, solubility, and strength. True terpeneless oil of lemon, which is the subject of this note, is an oxygenated liquid of constant boiling-point, specific gravity, and composition. Commercial oil of lemon has a specific gravity of 0.860 at 15° C.; the terpene known as citrene has a specific gravity of 0.850; while the ordinary terpeneless oil of lemon (i.e., freed from citrene) has a specific gravity of 0.900. The ordinary terpeneless oil of lemon is really a mixture of several oxygenated compounds, but by fractional distillation a liquid has been obtained which has a constant composition, an exceedingly strong odor of lemon oil, a specific gravity of 0.962, a boiling-point of 206° C., and a specific rotatory power of  $[\alpha]_D = +6.42$ . The following results were obtained on submitting this liquid to analysis:

0.5813 grm. gave 1.5185 grm. of  $CO_2$ , and 0.5617 grm. of  $H_2O$ .

	Found.	Calculated for $C_{10}H_{16}O$
Carbon .....	77.6	77.93
Hydrogen .....	11.8	11.68
Oxygen .....	—	10.40

The above figures correspond with the empirical formula  $C_{10}H_{16}O$  for the true oil of lemon—that is to say, for the terpeneless oil of lemon of constant composition, which appears to be an isomer of borneol.—*Chemical News*.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**To Distinguish Between Artificial and Genuine Musk.** T. R.—A number of chemical substances are said to have the property of destroying the odor of artificial musk without affecting the natural, quinine sulphate possessing it in a marked degree. All bodies containing hydrocyanic acid are considered useful for the purpose, essential oil of almonds being often employed. Sulphur and camphor produce with the artificial an exceedingly disagreeable odor.

**Registration in New York and Philadelphia.** M. R. writes: "Can a pharmacist passing the New York City Board of Pharmacy practice in New York State and in Philadelphia?"

The law of this State requires that each person desiring to be examined by a board of pharmacy must be a resident of the district in which the board has its jurisdiction, or state that he is about to take a position in that district. If at any later period he wishes to take a position in another part of the State he can register on the certificate obtained at the time of his successful examination. This applies only to four boards in this State.

In Pennsylvania it requires an examination by the State board. They do not accept any certificates of other boards or diplomas of any college of pharmacy.

**The Old Tax on Patent Medicines.** J. S.—The internal revenue tax formerly levied upon patent medicines in this country was as follows: Upon every packet, box, bottle, etc.; sold at retail at a price not to exceed

25 cents .....	1 cent
Between 25 and 50 cents .....	2 cents
Between 50 and 75 cents .....	3 cents
Between 75 cents and \$1 .....	4 cents

When the price exceeded \$1, then "for each and every fifty cents or fractional part thereof over and above the \$1, as before mentioned, an additional 2 cents." These taxes were removed by the Tariff Act of March 8, 1883, taking effect (as to this section) on July 1, 1888.

**Hair Dyes.** N. G. R.—You do not mention the shade of color required. You may, however, succeed in making a suitable selection from the list given below.

## BLACK.

## Take of

Nitric acid .....	1 drm.
Gum arabic .....	1 drm.
Sap green .....	3 drms.
Nitrate of silver .....	12 ozs.
Distilled water .....	20 ozs.

## Mix.

## BROWN.

## Take of

Acetate of lead .....	2 drms.
Sodium hyposulphite .....	1 oz.
Glycerin .....	2 ozs.
Rose water .....	14 ozs.

The lead and sodium salts are dissolved in separate portions of the water and filtered; then they are mixed and the glycerin is added.

## CHESTNUT.

## I.

## Take of

Citrate of bismuth .....	1 oz.
Distilled water .....	2 ozs.
Rose water .....	2 ozs.
Rectified spirit .....	5 drms.
Liquid ammonia .....	a sufficiency

## II.

## Take of

Sodium hyposulphite .....	12 drms.
Distilled water .....	4 ozs.

## Mix.

Solution No. 1 is first applied to the hair with a brush and solution No. II. afterward.

## GOLDEN.

Take of peroxide of hydrogen 6 per cent. solution. Apply with a brush.

**Lute.**—M. & B. write: "Will you please publish a good working formula for making lute, as we are much annoyed by the loss of alcoholic vapor from our pharmaceutical still."

Next to a thin strip of india rubber, which is usually employed, a mixture of flaxseed oil and precipitated chalk, equal parts, made into a stiff paste with water, can be recommended. Ground almond cake from which the oil has been pressed may be substituted with advantage for the flaxseed meal. Both the above are much used for stills, retorts and other vessels that are not exposed to a higher

heat than about 320° F. They are capable of resisting the fumes of volatile oils, alcohol, weak acids, etc., for some time.

**Dentists' Tooth Cement.** P. R. Q.—A compound prepared as follows is said to afford an excellent filler for cavities in teeth, and is employed to some extent by dentists for that purpose:

Zinc oxide .....	98 parts
Calcined magnesia .....	2 parts
Acid phosphoric, glacial .....	q. s.

The powders are intimately mixed in a warmed mortar, and enough glacial phosphoric acid, which has been previously melted with the aid of heat, added to form a paste. The compound sets hard on cooling.

**Cosmo Cream.**—R. B. asks us to print a formula for the "Cosmo Cream," made by W. J. Pichin, Philadelphia. This we are unable to do, as we have never seen a sample of the article or any account of its having been examined. If a creamy cosmetic is desired the following recipe from a former number of THE PHARMACEUTICAL RECORD will be found serviceable:

Olive oil .....	2½ ounces
Soap .....	2½ ounces
Wax .....	2½ ounces
Spermaceti .....	2½ ounces
Sweet almonds .....	4 pounds
Oil rose .....	250 grains
Rose water .....	4 pints
Alcohol .....	1 pint

**Bougard's Cancer Paste.** C. O. G.—The preparation in use by New York dermatologists is compounded as follow:

Wheaten flour .....	22 3 i
Powdered starch .....	22 3 i
Arsenious acid .....	gr. viii
Red sulphide of mercury .....	gr. xi
Ammonium chloride .....	gr. iv
Corrosive sublimate .....	5 i
Zinc chloride .....	5 i
Boiling water .....	5 i

The first six substances are finely ground and then mixed in a glass mortar. The chloride of zinc is dissolved in the boiling water and this solution slowly added to the powder, the contents of the mortar being kept rapidly moving with the pestle until all the solution is added; then let it stand for about 24 hours.

## Correspondence.

## A Warning.

**Editor AMERICAN DRUGGIST:**

Will you kindly give this communication space in your valued paper, in order that druggists may be on the lookout for a person who has already victimized a number of retailers in Indiana and Ohio?

The last we heard of him he was in Rising Sun, Ind., where he gave the name of Dice. In another town he represented himself as Manning, claiming to be putting up signs for Paine's Celery Compound and offering to put the dealer's name at the bottom of the sign, if the dealer would pay him a dollar or more. In New Albany, Ind., he swindled not only druggists, but also dealers in other lines, and skipped the town, leaving the hotel bill unpaid. In Rising Sun he told the druggists that he was working southward.

He is about five feet ten inches, dark hair turning gray, heavy grayish moustache, somewhere between thirty and forty years of age, a coarse voice and coarse features, and is a very smooth talker and a rapid and handsome sign writer. We hope that this will prevent any one else being duped by this person.

WELLS & RICHARDSON CO;  
BURLINGTON, Vt.

## News and Notes.

### Connecticut Pharmaceutical Association.

The eighteenth annual meeting of the Connecticut Pharmaceutical Association took place at Hartford on February 6 and 7. The attendance was gratifyingly large, visitors from remote places in and out of the State being there in goodly numbers. Prominent among the latter were Prof. E. L. Patch, president of the American Pharmaceutical Association, Francis M. Pease, Lee, Mass., and Henry Canning, of Boston, president of the Interstate Retail Druggists' League. These gentlemen in addressing the members took occasion to congratulate the association on its flourishing condition. At the conclusion of Professor Patch's speech that gentleman was presented with a wooden ham and a wooden nutmeg as examples of the more notable of the products of Connecticut.

After the reading of the president's, secretary's and treasurer's reports a spirited discussion took place regarding the action of the Committee on Legislation and their work. Mr. Hillard, of Bristol, took the committee to task quite severely for their action. It was his opinion that the law which made a man liable to lose his license, if in a no license town he were to administer a glass of brandy to a sick man, was unjust, and should not appear on the statute books. Mr. Hillard was ably seconded in his remarks by a gentleman from Jersey City and opposed by J. K. Williams of Hartford, and A. J. Wood, of West Haven, and President Willis L. Mix.

The first day's proceedings were brought to a close by a motion to adjourn, which being carried, the members and their friends filed into Jewell Hall, which had been prepared beforehand for a banquet, the tables groaning with the good things which make druggists happy. As a subject of study each of those present faced a menu card on which was printed:

MENU.		
OYSTERS ON DEEP SHELL.		
Chicken soup, a la Reine.		
Soup Sticks.		
Broiled Bluefish, Maitre d'Hotel.		
Julienne Potatoes.		
Olives.	Lettuce and Tomato Salad.	Celery.
Roast Green Goose, Apple Sauce.		
Baked Mashed Potatoes, French Peas.		
CRÈME D'MENTHE PUNCH.		
Fricandeau of Venison, Larded, with Currant Jelly.		
Saratoga Chips.		
Ice Cream.		
Assorted Cake.		
Nuts and Raisins.		
Crackers.	Cheese.	Coffee.

The toastmaster of the evening was J. K. Williams, of Hartford, who introduced Alderman Furlong, who in the course of his remarks to the banqueters made many complimentary references to the standing of the pharmacists in the community. He concluded by extending to the visiting druggists and their friends the freedom of the city of Hartford. President Mix responded very gracefully in behalf of the association and the visitors.

Professor Patch was then introduced as the speaker of the evening and made response to the toast "The American Pharmaceutical Association and the Detroit Plan." He was followed by J. Addison Porter of the *Hartford Post* who spoke on "The Press;" Rev. Frederick Stanley Root on "The Clergy;" Dr. Cook on "Our Medical Friends;" Charles Rapelye on "The Pharmacy Board." Other speakers at the banquet were Thomas R. Shannon, E. S. Sykes and Julius Rathburn.

There was no medical or pharmaceutical exhibit held this year in connection with the meeting of the association, but the following representatives of wholesale houses were present: Mr. Engstrom, of Fox, Fultz & Webster; Mr. Foerster, of Sharp & Dohme, as also the representative of Parke, Davis & Co., and Whitall, Tatum & Co. The number of guests in attendance at the banquet was fifty-eight.

The second day's meeting was called to order on Wednesday morning at 10 A.M. when the advisability of abolishing the present annual license tax of \$2 was taken up and warmly discussed.

Charles Fleischner was in favor of abolishing the tax, and spoke at some length on the subject. He presented a resolution providing that a committee of three be appointed to abolish a fee.

He was opposed by Messrs. Sevin, of Norwich; Rapelye, of Hartford, and Smith of Ansonia, and the motion being put to a vote was lost. The election of officers for the ensuing year was taken up next and resulted as follows: President, James Duggan, of Norwich; vice-presidents, A. F. Wood, New Haven, and C. P. Gladding, Hartford; secretary, F. Wilcox, Waterbury, and treasurer, L. H. Goodwin, Hartford.

For Pharmacy Commissioner, Charles Rapelye was nominated to succeed himself. He very gracefully refused the nomination, however, stating among other reasons that as he had spent six of his best years in the service of the commission he could not consent to fill the position longer. The following members were nominated for selection by the Governor: F. W. Newton, Hartford; S. W. Smith, Ansonia; James O. May, Naugatuck; F. M. Wilson, Willimantic; E. W. Thompson, New Britain, and E. A. Hough, Collinsville.

The time and place of the next annual meeting was then considered and the invitation of N. W. Sevin to meet in Norwich was accepted.

The following names were then presented for election to membership, and on motion duly made and seconded the gentlemen named were declared members of the Connecticut Pharmaceutical Association: E. J. McNulty, Middletown; Harry W. Hyatt, Bridgeport; John Humphrey, New London; James L. Hanens, New London; C. H. Talcott, C. P. Hannen, C. L. Hubbard, G. E. Myers, and W. H. Coleman, Hartford, and G. H. Pikes, of East Hartford.

Henry Canning and George W. Hough were then introduced and spoke of the Detroit plan and the Interstate Retail Druggists' League.

A. F. Wood, of New Haven, who is Reporter on the Progress of Pharmacy to the association, then read his annual report. Among other things the stability of syrup of iron iodide was commented upon. Mr. Wood exhibited a four ounce bottle of the syrup, and said he had no trouble in keeping the syrup if immediately after being made it was preserved in glass stoppered bottles and the latter exposed to sunlight. He also presented a formula for cold cream which embodied some advantages not found in other formulas and furnished a preparation of the most satisfactory kind. It is as follows:

#### COLD CREAM.

White wax.....	1 ounce
Expressed oil of almond.....	4 ounces
Rose water.....	3 drachms
Borax.....	30 grains
Oil rose.....	3 drops

To the melted wax add the oil of almond and borax, mixing all thoroughly, and when nearly cool incorporate the rose

water, and when quite cool add the oil of rose.

The following is a partial list of those in attendance at this meeting: F. Wilcox, L. I. Munson, J. K. Williams, S. Chester, J. Welden, W. D. Heald, G. T. Johnson, W. E. Gibson, A. D. Pierce, T. R. Shannon, S. F. Guernsey, E. E. Fisher, E. W. Thompson, S. W. Smith, W. C. Hillard, G. P. Chandler, D. B. Chabot, E. S. Sykes, C. S. Williams, W. S. Mix, A. F. Wood, C. F. Messenger, F. M. Pease, D. G. Stoughton, E. W. Merriman, J. P. Wood, D. W. Tracy, L. H. Tracy, A. H. Rungee, E. E. Pierce, D. P. Caluen, W. H. Sargent, J. A. Hodgson, Charles Fleischner, Charles Rapelye, F. B. Edwards, E. A. Hough, C. P. Gladding, James Duggan and William H. Allen.

### Gotham Gossip.

The New York Academy of Medicine, No. 17 West Forty-third street, has opened a Nurses' Bureau for the purpose of providing nurses for physicians and patients.

Articles of incorporation were issued at Albany on the 10th inst. to J. N. Hegeman & Co., the well known retail pharmacists of this city. The new company starts with a capital of \$50,000 and a board of directors composed of J. Niven Hegeman, John W. Ferrier, Joseph G. Glenny and Lucius A. Wilson.

Clough & Macconnell, well known to our readers as makers of various kinds of wire corkscrews, have dissolved partnership, and through an amicable arrangement divided their business into distinct branches. Dating from January 1, 1894, William R. Clough became sole proprietor of their wire corkscrew patents and trade, and will continue the manufacture at Alton, New Hampshire, under the trade name of "The Clough Wire Corkscrew Co.," and James M. Macconnell became the sole proprietor of their decorated folding corkscrew patents and trade, and will continue the manufacture at 182 Nassau street, New York.

Among the passengers who sailed for Liverpool on the steamship *Umbria* last Saturday was H. B. Mason, a son of Alfred Henry Mason, treasurer of Seabury & Johnson, New York. Young Mr. Mason, who is a gentleman of most agreeable manners and pleasant address, goes to London to fill an important position with the firm of Oppenheimer & Co., Ltd., the widely-known manufacturing chemists and inventors of "Palatinoids" and "Bi-palatinoids," the new forms of gelatin pills. The ability shown by Mr. Mason during his connection with the firm of which his father is treasurer augurs well for his success in the new field to which his promotion has called him.

### Boston.

Dr. Horace L. Bowker is confined to his home by sickness.

William C. Durkee, Ph.G., has been in New York State for several weeks.

T. P. Hawkes, Danvers, sustained a loss of \$2,500, by a recent fire in that town; partly insured.

A. S. Letourman, Pleasant street, Fall River, has a new fountain from the Low Art Tile Company's factory.

E. A. Bowen, of Malden, and T. F. Whalen, of Webster, are recent purchasers of Low Art Tile fountains.

Dr. Thomas L. Jenks, treasurer of the Boston Druggists' Association and chairman of the Public Institutions Commission, is sojourning in Florida.



Heath Bros.' extracts works, East Free-town, were destroyed by fire, entailing a loss of \$10,000; insured for \$5,000.

Peter Dempsey, employed by Weeks & Potter, was arrested recently, and charged with the embezzlement of \$18.38.

Otto Muller, 418 Broadway, Lawrence, has been arrested and charged with violating the liquor law. He was subsequently convicted and fined \$100; he appealed.

The Massachusetts College of Pharmacy has received an excellent table balance from the Franklin Educational Company, and a suppository mold of new design from the E. L. Patch Company, of Stoneham.

Belyea's drug store, Holbrook, was destroyed by fire recently. The destruction of the stock, valued at \$2,800, was complete; fully covered by insurance. This is the second time within two years that fire has attacked a drug store in this same location.

The bill relative to the granting of druggists' licenses, and known as "House No. 87," was originally introduced in the House and was referred by the speaker of that body to the Committee on Liquor Law. It was taken from that committee by the House, however, and referred to the Committee on Public Health. When the matter reached the Senate that body failed to concur in the reference, and the bill was relegated to the Committee on Liquor Law.

Leonard J. Pastor and Eugene Levitan, who obtained a certificate from our board of pharmacy by questionable means, have been indicted by the grand jury and charged with conspiring to defraud the board, Pastor, so it is alleged, taking the examination in the name of Levitan, whereby the latter obtained a certificate to compound drugs. When the cases were called both defendants pleaded not guilty; the trial will undoubtedly take place this month.

### Michigan Mention.

J. J. Harrah, Detroit, has sold his drug stock to F. Ducat, who will conduct the business at the corner of 23d and Myrtle streets.

F. E. Clough has entered the employ of T. H. Hinchman & Sons as traveling salesman. He was formerly with Druggist A. S. Parker, Detroit.

Dr. C. P. Bigelow, formerly a well-known druggist at Grand Rapids, has been ill during the entire winter at his home in Big Rapids. His death is hourly expected.

H. J. Milburn & Co., Detroit, have filed their annual report as follows: Capital stock fully paid in, \$22,000; personal property, \$39,791.72; debts, \$23,892.74; credits, \$16,850.47.

Frederick Stearns & Co. have filed their annual report. Capital stock fully paid in, \$2,000,000; real estate, none; personal property, \$208,156.57; debts, \$185,927.78; credits, \$195,014.14.

The retail druggists of Detroit are up in arms against the cutters of that city. For some time they have been nursing their wrath and watching the increasing business flow toward the cut rate concerns. A rumor that A. A. Brown, the principal offender, would shortly start another cut rate pharmacy at 180 Woodward avenue, and that Mahler the grocer would add a

drug department, brought things to a head. The Detroit Pharmaceutical Association held a largely attended meeting at the Cowie Building, Feb. 9. About fifty were present. A set of resolutions was passed and the entire body will meet competition by cutting prices to the limit on patent medicines and all proprietary articles. Various plans were discussed and it was decided that from now on it would be a survival of the fittest. The local association will try and secure the aid of the N. W. D. A. in its endeavor to crush these pirates of the trade.

### Cincinnati Notes.

Edward W. Kneese, the druggist at Fourth and Scott streets, made an assignment.

Albert Meininger will open a new store at the corner of Chase avenue and Hamilton Pike.

A bill has been introduced to repeal the pharmacy law. All persons who have had five years' experience as pharmacist will be allowed to register without examination.

John G. Fratz, the well-known druggist at the corner of Kenyon avenue and Baymiller street, is in a precarious condition at his home from nervous prostration, and his end is said to be near.

An intoxicated laborer entered the drug store of Mr. Klayer, at Ninth and Elm streets, and wanted to assault the proprietor because he did not have soda water on draft. An officer arrested the man before he had an opportunity to carry out his intention.

The Hamilton County delegation have signed a petition to Governor McKinley asking for the appointment of Albert Meininger, of Cincinnati, as a member of the State Board of Pharmacy Examiners. Mr. Meininger was for years the druggist at Twelfth and Vine streets. There is no question of his ability for the office, and the Governor, it is said, is favorably inclined to his selection.

### Random Notes.

William R. Warner, head of the highly successful firm of W. R. Warner & Co., was a sufferer from the grip.

Messrs. C. D. Bradham and Harry Brock, of New Berne, N. C., have purchased the drug store of C. C. Green.

Harry Chambers, the popular salesman of J. M. Maris & Co., is at home after a successful trip through the South.

The Toledo Drug Company was recently organized in the temporary office of West & Truax. It is capitalized at \$150,000.

Notwithstanding the severe weather and increase of the seasonal diseases, cholera is not decreasing generally in Austria. Some of the provinces do show a decline where the disease has been intense, but in Hungary proper the disease is still increasing, as shown by the official list of deaths and attacks.

Prof. C. S. Hallberg, of Chicago, has taken unto himself a wife. The bride, whose maiden name is Therese Bergstrom, is a native of Sweden, Stockholm, having been her home for some years. She came to this country less than six months ago for the purpose of introducing among American ladies the art of fine wood carving, she herself being an accom-

plished artist in this branch of sculpture. Congratulations are now in order, and THE DRUGGIST AND RECORD takes the first opportunity of wishing the newly married couple a full and abundant measure of earthly happiness.

The principal creditors of the insolvent Crescent Drug Co., of Newark, N. J., have petitioned the court to continue the receivership in the hands of John R. Hardin, as they feel confident that by doing so they can obtain a very much better price for the property than has yet been offered. The petition has been granted. It will be remembered that the Crescent Drug Co. was an aggressive cutter before it went into insolvency. The company began an aggressive cut on several standard lines of perfumes, selling by the ounce at twenty-five cents what others had been selling at forty. The local trade lodged a vigorous protest with the manufacturers and succeeded in cutting off supplies of some of the goods that were being cut.

### Association Notes.

KANSAS PHARMACEUTICAL ASSOCIATION.—The date of annual meeting of this association has been changed to May 22, 23 and 24, 1894. It will be held at Selina. Full particulars can be obtained from the secretary, Mrs. M. O. Miner, Hiawatha, Kan.

MASSACHUSETTS COLLEGE.—The Alumni Association of the Massachusetts College of Pharmacy intend to hold a social meeting at the College Building on Tuesday evening, February 27, at 7.30 o'clock. An entertainment is to be provided and each member is invited to bring a lady friend.

MASSACHUSETTS BOARD.—John Larrabee, member of the board of pharmacy and town clerk of Melrose since 1878, has resigned the latter position, the resignation to take place next month. Ill health and the press of other business are the reasons assigned by Mr. Larrabee for taking this step.

The fourth annual convention of the Ohio, Indiana and Kentucky Wholesale Druggists' Association was held at the Burnet House. Twenty delegates representing the largest drug houses in the State, were present and elected the following officers for the ensuing year: President, N. A. Lloyd, Cincinnati; Wm. Rinz, Louisville, vice-president; George Lattimer, Columbus, secretary and treasurer.

### Obituary.

Dr. J. K. Hasskarl, who introduced the cinchona plant into Java, died at Cleves, Germany, on January 5, at the age of eighty-two. In 1852 he was sent by the Dutch Government to South America to collect cinchona seeds and plants. He did not confine himself to collecting *calisaya*, but gathered seeds and plants of other varieties, some of which were new. In 1854 he successfully carried about four hundred *calisaya* plants to Java, but two years later he left Java, owing to differences between Dr. Junghuhn and himself on many vital principles of the system of cinchona culture. The *Chemist and Druggist*, in a reference to the death of Dr. Hasskarl, comments on the singular fact that the most valuable of all cinchonas, the *Ledgeriana* variety, was not introduced into the Indies by any of the collectors specially appointed by the British or Dutch Governments, but by a private trader in South America, the late Mr. Ledger.

Charles R. Paddock, for many years one of the best known druggists in Brooklyn, died at his late residence, 287 Clermont avenue, in that city, on Wednesday, February 7. He was born in Liverpool, Onondaga County, N. Y., on April 18, 1841, and received a public school education. When quite young his parents moved to Oswego, where Charles H. Butler, a well-known druggist of the city, took a fancy to him, because of his brightness in the Sunday-school class. While with Mr. Butler he acquired a good knowledge of pharmacy, and at 21 years of age, in 1862, he enlisted with the One Hundred and Forty-seventh New York Volunteers as hospital steward and did much good service until the close of the war. In 1877 he removed to Brooklyn where he found employment in the drug store at the corner of DeKalb and Clermont avenues. In a comparatively short while he bought out his employer and prospered well. In 1887 he established a branch at the corner of Lafayette and Carleton avenues. In this venture success also attended his enterprise. He was for two terms president of the Kings County Pharmaceutical Society taking an active part in the affairs of that body. A widow and a son survive him. The funeral services were attended from his late residence on Thursday, Feb. 8. His remains were taken for burial to Hannibal, Oswego County, N. Y.

Charles M. Hodge, of Newburyport, Mass., died at the residence of his son-in-law, Mr. Warren T. Currier, in Boston, on February 6, of pneumonia, after a brief illness. The deceased was born in Newburyport in 1816, received a public school and academical education, and, obtaining a thorough knowledge of drugs and chemicals, started business as a druggist in his native town, retiring a score of years ago with a handsome competency. Early in life Mr. Hodge became interested in the collection of coins, confining his attention particularly to American money in gold and silver, but in his collection he had many rare pieces. He was also a lover of the antique, and at his home on High street, Newburyport, he had many articles that were of great value, and numerous specimens of his talent with the brush. Mr. Hodge was a man of quiet tastes, a thorough student, and a most agreeable companion. He served four years in the Newburyport city council, of which he was a valued member. He leaves a widow and two daughters.

### Recent Drug Fires.

J. W. Green & Bro.'s store, Elizabethtown, Ky. Loss \$12,000; partly covered by insurance.—E. D. Poston's store, Springfield, Ill. Loss \$5,000; partly insured.—Roland Smith's store, Alpena, S. D.—Monroe Drug Company, Unionville, Mo.—I. N. Perley's store. Loss \$4,000; partly insured.—The Kassel store, Waco, Texas. \$3,500 loss; partly insured.—Joseph Jacob, Atlanta, Ga. Loss \$100,000; partly insured.—J. McCurdy's store, Providence, R. I.—Dr. Croker's store, Narrowsburg, N. Y.—E. P. Smart's store. Damage \$2,000; fully insured.—W. Pettingill, Winnipeg, Man.—Beattie & Hawkins, Richmond, Va.—H. Pennington, Monticello, Minn. Loss \$3,000; partly insured.—Howard & Hanie's store, Duluth, Minn. Loss \$10,000.—Hegeman's store, 196 Broadway, New York. Damage \$50,000.—Hallett's store, Bath, Me. Loss \$15,000; partly

insured.—Dr. J. W. Jackman's store, Caseville, Mich. Loss \$4,000; partly insured.—J. J. Shulser's store, Broad Block, Broadway, Loveland. Loss \$5,000.—John McKinley's store, Caseville, Mich. Loss \$7,000 to \$8,000; partly insured.—Elite Drug Store, 214 West Main street, Kalamazoo, Mich. Damage \$200; partly insured.—Barrett & Co's, Solomon City, Kan. Totally destroyed; insured fully.—Carter's, Salina, Kan. Totally damaged; fully insured.—W. G. Kidder's store, Bath, Me. Loss \$150; no insurance.—Webber's store, Bath, Me. Loss \$7,000; partly insured.—John W. Perkins & Co., Portland, Me. Loss \$3,000.—O. P. Allen's store, Palmer, Mass. Loss \$7,000; partly insured.—Belyea's store, Holbrook, Mass. Loss \$3,800; covered by insurance.—Laymon & Co., Salt Lake City, Utah. Loss \$300; fully covered by insurance.—C. W. Blake, Kalamazoo, Mich. Damage \$1,500; partly insured.—Wm. Skillicorn & Co., drug store, Silver City, Ia. Total loss.—Fawcett's store, Toronto, Ont. Damage \$2,000; partly insured.—Monroe Drug Co., Unionville, Mo.—Daniel Cronin's store, Warren, Mass.—Bush & Co., wholesale druggists, Worcester, Mass. Damage \$2,242; fully insured.—Hickey's store, Lowell, Mass. Damage \$150.—Messrs. Beattie & Hawkins, Manchester, N. H. Damage \$2,000; insured.—Mussers's store, St. Paul, Minn. Small loss.—M. Giddings' store, Jackson, Mich.—Browning & Son's store, Indianapolis, Ind. Loss several hundred dollars, with insurance.—Swift's Pharmacy, Brockton, Mass.—The Health Bros. Chemical Extract Works, New Bedford, Mass. Loss \$10,000; partly insured.

### Kings County Pharmaceutical Society.

The February meeting of this society was held in its meeting room at 399 Clason avenue, Brooklyn, on Tuesday, February 13, 1894, at 2:30 p.m.

A paper was presented on The Preparations of the New Pharmacopoeia, by W. P. DeForest. This was discussed by Dr. J. F. Golding, Messrs. William Muir, F. H. Pamphilon and F. N. Bliss. A discussion on How May We Make the Best Citrate of Magnesia was opened by W. B. Averre, and the matter discussed by L. T. Perkins, O. A. A. Rouillion, D. L. Cameron, L. F. Stevens and John Pfeiffer. The Telephone System in Brooklyn was also discussed. Members of the society and all interested in pharmacy are urged to attend, take part, and help make these occasions both interesting and profitable

### A New Version of the Beef, Wine and Iron Yarn.

The man was in a brown study when he went into the drug store. "What can we do for you?" inquired the clerk. "I want black something of something," he said. "Have you got any?" "Probably we have," replied the clerk. "but you'll have to be more definite to get it." The customer thought for a moment. "Got any black sheepskin of something?" he asked. "No; we don't keep sheepskins. We have chamois skins, though." "That isn't it, I know," said the customer. "Got any other kind of skins?" "No." "Skins, skins, skins," repeated the man struggling with his slippery memory. "Calfskin seems to be something like it. Got any black calfskin of anything?" "No, not a one," and the clerk laughed. The cus-

tomers grew red in the face. "By Jove!" he said, "if it isn't a skin, what in thunder is it?" "Possibly it's a hide," suggested the clerk. "That's it! That's it!" explained the man. "Have you got any black hides of something or anything?" The clerk shook his head sadly, as the man tramped up and down the store. "Got any black cowhide of anything?" he asked after a moment's thought. The clerk's face showed a gleam of intelligence and then broke into a smile. "Possibly it is black oxide of manganese you want," he said quietly. The customer almost threw his arms around the clerk's neck. "Of course, that's it," he exclaimed. "I knew there was a skin or something somewhere about the thing," and he calmed down and waited for what he wanted.

### Trade Notes.

M. B. Stone, manufacturer of novelties at 430 Ninth street, N. W., Washington, D. C., is introducing "Stone's Patent Paper Julep Straws," a form of julep straw that is claimed to possess many advantages over the ordinary straw. The Patent Paper Julep Straws are made of waxed manilla paper to resemble natural straw, and are quite free from taste or odor besides being impervious to alcohol. In bringing these straws to the notice of druggists the point is made that paper straws are never "musty" and every one is sweet, clean and perfect. The straws may be ordered through any jobber or direct from the maker, M. C. Stone, 430 Ninth street, N. W., Washington, D. C.

### A Profitable Investment.

The majority of prosperous druggists have an accumulation of money from time to time which they feel justified in withdrawing from their business and investing elsewhere. These amounts vary from several hundred to several thousand dollars, and there is often a serious question as to how this money can be invested so as to be safe and still yield the best returns.

All those seeking an opportunity for such investment should write to the Columbian Pharmacal Co., 20 Cedar street, New York City, for a prospectus of the bonds which they are issuing on their handsome and substantial properties in Versailles, Conn. When writing them please mention this journal.

### Good Value.

In these days of fierce competition when dealers find it difficult to make profits they must constantly be on the lookout for items of the best possible value. Such an item is the "Good Value" cigar, which embodies an effort by the manufacturer to furnish as good a cigar for \$20 per thousand as is usually sold for \$35. They are clean, sweet, country made, from pure Spanish seed tobacco, containing scarcely any nicotine, smoke free, burn white, and are made and packed on the principle of "Nothing for Style—Everything for Quality." They are packed in rough boxes containing 250 for \$5, but if desired can be had in boxes of 50 for \$1.10.

They are sold only for net cash at the "Good Value" Cigar Agency, 143 Chambers street, New York City. Five sample cigars will be sent on receipt of 10 cents in stamps.

## Compressed Antipyretics.

The widely known house of John Wyeth & Brother, Philadelphia, call especial attention to their compressed tablets of the new antipyretics. This announcement, in view of the prevailing epidemic, of La Grippe, is particularly timely and should be carefully scanned by every druggist. In the form of compressed tablets John Wyeth & Bro., of Philadelphia, are prepared to supply the following remedies: antipyrine, antipyrine and quinine, antipyrine and salicylate of soda, acetanilid, acetanilid compound, analgesine, acetanilid and salol, antifebrin, antifebrin chocolate, phenacetine, phenacetine and caffeine and phenacetine and salol. Write them for list.

## Help at Your Soda Fountain.

Hance Brothers & White write us that no druggist who has a soda fountain can afford to be without their book, "Help at Your Soda Fountain," free. It has been revised and is full of help and advice. It tells all about soda, how to make and serve it fine, all that daintiness means, thin glass the thinnest of tumblers, how to be ready, quick and agreeable, the importance of acceptability in your attendance, how to get into the way of seeing things—all things—from the point of view of your public, how to make your store a pleasant place to go to, and how to make buying agreeable; besides, it contains about 150 formulas for all the latest drinks as well as the old standbys and formulas for mineral waters and hot soda as well. Also about 10 pages of the brightest hints on soda water we have ever seen from the pens of practical druggists who have made money on fine soda.

We congratulate Hance Brothers & White on having made such an interesting book on a subject that is not easy to write about, and thank them in the name of our subscribers for the pains they have taken and, indeed, are taking in their efforts for finer soda.

## Hagerty Graduates.

In the annual catalogue of Hagerty Bros. & Co., manufacturers and importers of druggists', chemists' and perfumers' glassware, 5-10 Platt street, New York, there is listed a full line of the glass graduates for which this firm is justly noted. Like all the glassware sent out by this firm, in which accuracy of dimension is a requirement, these graduates are graduated with extreme care, the point being made that the divisions of measurements are made in accordance with the rules laid down in the United States Pharmacopoeia. The engraved circular lines extend fully seven-eighths around the outer surface, which arrangement, it is claimed, precludes the necessity of placing the graduate upon the counter to get the contents thereof on a level.

The adoption of the metric system of weights and measures in the new United States Pharmacopoeia makes it necessary for every pharmacist to possess measures graduated in that system. But the catalogue contains more than a list of metric graduates, prescription vials, rubber stoppers, decorated show jars, drawer knobs, medicine chest bottles, thermometers, drug mills, besides many other articles which it would take too much space to mention here, are listed and illustrated in its pages. The catalogue, which is an octavo, handsomely bound in cloth, will be sent free to any druggist upon request, if they mention this paper at the time of writing.

## NOTES ON PRICES.

## PACKAGE PRICES.

In the Package Prices Current of Wm. H. Raser, drug broker and commission merchant, 132 Platt street, New York, issued under date of February 7, 1894, it is remarked with respect to quinine that since the advance of a week ago the demand has been less active, but orders for jobbing quantities are coming in steadily and manufacturers' quotations for foreign bulk can be shaded from 1 @ 1½¢. per ounce, being quoted by outside holders at 2¾¢ @ 24c. and for round lots at 2¾¢. cash. The bark sale in London yesterday cabled firm at previous to slightly advanced figures. Cinchonidine bulk: the cheaper sellers have advanced their figures to 2½¢. for large lots, 2½¢ @ 2½¢. for smaller quantities in 100 ounce tins, while others have marked up the price to 3c. Opium is firm and steady with \$2.70 generally quoted for cases, but \$2.75 will yet buy single case lots with the usual advance for broken lots. Pure powdered opium \$2.25 @ \$2.35 as to holder, and some asking more. It is possible that \$2.20 may yet buy in good sized lots. Morphine is in active request, even at the advance. We have been able to place orders at 5c. under manufacturers' price, but the cheaper lots are disappearing and it is getting more difficult to find sellers for other brands; domestic and foreign quotations can in some instances be shaded. Acid, oxalic, has further stiffened, 6½¢. generally asked but still can buy single casks at 6½¢. Citric acid declined to 42½¢ @ 43c. Tartaric, crystals, at 21½¢., powdered 22c. Cream tartar, powdered, single bbls. at 17½¢., round lots could be secured at 17c. if not less. Chlorate of potash, demand is good and 14½¢ @ 14½¢. for crystals, 14½¢ @ 14½¢. for powdered. Chloral hydrate has been advanced. Chicle, easier. Asafoetida very firm at recent advance. Ergot has further declined. Shells in absence of demand prices are a trifle lower here, though stronger reports from abroad. Arabics have steadily declined and now sorts Arabic and sorts Senegal are about on a parity in price. Tragacanth continue high. Mannas, all grades, are lower. Seeds, Canary, Smyrna, somewhat firmer and 2¾¢. asked, though 2¾¢. will still buy. Dutch Canary further advanced. Celery dull and easier. Coriander continues scarce and high. Saffron, Valencia, higher. Olive oil, yellow and green, have advanced. Linseed oil is higher. Spirits of turpentine advanced. Wood alcohol declined. Gambler, spot supplies limited and prices are higher. Spices—Ginger and pepper easier, round lots obtainable at 5c. and smaller lots at ½¢ @ ¼¢. more. Ginger, Jamaica, new crop and prices lower of new goods, old dry root worth more. Race and African gingers are also lower. Cassia, cloves, mace, and nutmegs are without new feature.

## Chicago Prices.

Morrison, Plummer & Co., importers and jobbers of drugs and manufacturing pharmacists, 200 to 206 Randolph street, Chicago, issue their monthly prices current under date of February 6, and referring to the position of the drug market remark that, all things considered, the year has made a satisfactory beginning, the volume of trade being somewhat in excess of the closing months of 1893. Orders are more frequent and quantities more liberal, indicating increased confidence in the future. Referring to the various price

changes since last report it is noted that Acetanilid has further declined, and is quotable at 40 @ 42c. Acids, Benzoic, German, tend upward. Citric, as also tartaric, slightly lower. Alcohol, wood, 95 per cent, has been reduced to 80c. gallon, in barrels. Ammonia, muriate, has enhanced in value owing to the advance abroad in nearly all ammonia products. The growth of the demand for use in electrical and metal working operations is steady, and stocks are said to be much reduced. Balsam Peru is firmer at \$1.65 @ \$1.75. Barks: E. I. Red and Calisaya reduced to 36 and 44 for whole and powdered respectively.

Chloral hydrate: manufacturers advanced price 15c. lb. on the 1st inst. Cocaine muriate was likewise advanced 25c. oz. on the same date. Cream tartar declined to 20 @ 25c. as to quantity. Gum: asafoetida, on account of ruling of the government customs appraisers refusing admittance of all gum containing less than 50 per cent. resin and 3 per cent. volatile oil, large lots have been reshipped to London, and all grades are held higher in consequence. If the ruling is enforced, a great deal of the trash sold as asafoetida will be removed from the market. Manna is lower, as a result of competition. Morphine, sulphate: American manufacturers advanced the price 15c. oz. on the 1st inst. in sympathy with a higher market for opium. Oils, essential: bergamot, cubebs, and lemon are lower. Other kinds without material change. Oils, heavy: lard, extra, is nominal at 70 @ 75c. as to brand. Linseed advanced 4c. per gallon on the 24th ult. Opium: since our last there has been a decided improvement in price, based on advices from the primary markets and the provision in the Wilson bill to impose a duty of \$1 per lb. That the advance is likely to be permanent is evidenced by the action of morphine manufacturers, as noted above. Quicksilver declined to 55 @ 58c., and mercurials have all been marked down. Quinine, sulph.: domestic and foreign manufacturers advanced the price 2½¢. per oz. on the 1st inst. Manufacturers now virtually control the distribution of this article, the amount in outside speculative hands being small. Seeds: canary, cleaned, higher at 3½¢ in sacks. Celery, lower at 20 @ 23c. lb. Sabdilla, powdered, which has ruled high for some time, has taken a downward turn, and is selling to-day at \$1. It may be expected to go lower. Turpentine advanced to 36½¢ in barrels, on the 2d inst.

## Review of the Wholesale Market.

NEW YORK, February 14, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The market for Drugs, Dyestuffs and Chemicals continues to reflect a fairly buoyant appearance, values ruling steady and the volume of trade being about on a par with that usually experienced at this period of the year. The movement, however, does not increase beyond the usual jobbing distribution, speculation in round lots being notably lacking. There is quite a good deal of dissatisfaction among importers with respect to the rejection of recent importations of asafoetida and ipecacuanha by the Customs authorities, the rulings of the Appraiser being regarded in some quarters as arbitrary and likely to interfere with the movement of these ar

ticles. The subject will come up for discussion, it is said, at the next meeting of the Drug Section of the Board of Trade and Transportation, and there is also talk of bringing the subject before the Secretary of the Treasury. Regarding prices there is a generally firm feeling, such fluctuations as have occurred being for the most part fractional and unimportant. Arsenic, white, is higher, and cocaine has further advanced. Nitrate of silver has declined, and acetate of lime, English calomel, galangal root and oil of lemongrass are lower. Opium has marked a further advance, and quinine continues firm, though quiet.

### DRUGS.

ACETANILID continues dull though prices are not notably lower. Bulk quoted 32 @ 33c.

ALCOHOL has not changed during the interval from \$2.24 @ \$2.28 as the range as to quantity, the usual rebate being allowed.

BALSAM COPAIBA continues held at the previous range of 33 @ 40c., but the distribution is limited, as the figures quoted are still above buyers' ideas. Para is offered at 35c.

BALSAM PERU is dull and the market is easy at \$1.40 @ \$1.50.

BALSAM TOLU from importers' hands does not offer below 25 @ 27c. but is meeting with moderate attention at this range.

BARK, CASCARA SAGRADA, is ruling firm with the demand favoring an improvement in the value. Sales of some 25 tons represent the aggregate business for the week just closed and spot goods are now held firmly at 5½ @ 6c.

BUCHU LEAVES, short, are meeting with moderate attention at previous values.

CACAO BUTTER, Dutch, is in limited supply; small lots can still be had at 33c. To arrive stock is being offered at the range of 32 @ 32½.

CASSIA BUDS are given very little consideration, though the market appears well sustained at the point of 15½ @ 16c.

CIVET, Aden, has advanced in the interval and is now quoted at \$2.50 per ounce.

COCA LEAVES, Huanaco, appear to be in improved demand and values are strengthening. Among recent transactions we are reported sales of 500 lbs. at 35c.

COCAINE MURIATE has advanced materially since our last report, manufacturers now quoting \$5.70 in oz. vials, \$5.75 in half do., \$5.80 in quarter do., and \$5.90 in eighth do. Contracts for 100 ounces 20c. less.

COD LIVER OIL.—New crop Norwegian will be received in this market soon. Lofoden oil on spot is quoted at the old range.

CODEINE has been advanced in sympathy with the crude material. The alkaloid in a quantity way is now held at \$4.25 in bulk and \$4.50 in eighths; sulphate at 85c. less. In jobbing quantities an advance of 15c. upon above figures is required.

ERGOT, German, has been freely inquired for and we are reported among other transactions sales of 1,500 lbs. at 27c.

JABORANDI LEAVES from importers' hands do not offer below 25c. and in a jobbing way up to 35c.

CUTTLE BONE, Trieste, continues in steady fair inquiry with the current sales of Trieste at 10½ @ 11c. as to quantity.

GLYCERIN continues somewhat unsettled though supplies are not offered openly below the basis 12 @ 12½c. in drums.

JUNIPER BERRIES have been in moderate request without, however, any change from the previous range of 2½ @ 3c.

KOLA NUTS are scarce and in the London market the quotation stands 1s. 6d. Parcels are offering to arrive here at 30c.

LAUREL LEAVES are cabled from Trieste as showing a decidedly stronger tendency, due to the influence of a short crop the past season and an unusually light supply for this period of the year. The value in this market is given as 3½ @ 4c., though the cost to import, it is said, is fully this range.

MENTHOL continues easy; "best brands are being freely offered at \$5.50. Ordinary quality Japanese, it is said, may be obtained at \$5.

MORPHINE continues in good demand and firm. We quote the market upon the basis of \$2 @ \$2.10 for bulk as to brand.

OPIUM, owing to the operations of large buyers, has marked a sharp advance since our last report, and the market is now firm with indications of a farther upward movement. The lowest open quotation of this market is \$3, and this price has been paid for single packages. In jobbing quantity there is a moderate distributive trade with the sales at \$3 @ \$3.10. Powdered does not change from \$3.50 @ \$3.75.

It is reported that the tariff of \$1 per pound was put into the tariff bill through the efforts of one man who has secured an option on the bulk of the stock in Smyrna.

QUININE continues in fair active jobbing demand with outside holders of foreign and also manufacturers' agents reporting an increased call both from consumers and the trade. Parcels in second hands are held at the previous range of 23½ @ 24½c. as to make, but the representatives of makers quote the uniform price of 25c. The market is exceedingly strong with the tendency toward a higher level. The London market is cabled 11½ @ 12d.

SOAP, Conti's, continues easy with store goods held at 9½ @ 10c.

TONKA BEANS are jobbing fairly with Angostura bringing \$1.50 @ \$2 and Para 35 @ 57½c.

VANILLA BEANS.—Bourbon have attracted some attention during the week, and we are reported a sale of 200 lbs. at \$3.50.

### DYESTUFFS.

CUTCH remains quiet, but the market is firm at 5½ @ 6c. for best grade SM and 5½ @ 5½c. for HT. There is a liberal supply of SM in market for which holders are anxious to obtain sale. Bids of 4c. would probably be entertained.

DIRI DIRI is selling in a limited way at \$55 @ \$65.

GAMBIER remains quiet, but the market continues firm in tone with 4½ @ 4½c. quoted for spot goods as to quantity. London stock may be purchased at 4½c. and direct shipments from Singapore 4½c.

INDIGO is in better jobbing demand with numerous small sales reported. Bengal quoted at \$1.25 @ \$1.65, Guatemala at \$1 @ \$1.20.

LOGWOOD continues in fair request, and importers' views are considerably strengthened by the close absorption of supplies in advance of arrival. Sales about 400 tons St. Marc at \$34.50 against \$34 last week.

NUTGALLS are jobbing moderately at the range of 13½ @ 14½c. for blue Aleppo.

SUMAC, Sicily, is held at \$72.50 @ \$77.50, and within this range a moderate jobbing trade is reported.

### CHEMICALS.

ACETATE OF LIME continues dull and prices are easier. Gray quoted \$1.60 @ \$1.75 and brown 90 @ 95c.

ALUM is in steady moderate request with the sales at \$1.70 @ \$1.75 for lump and \$1.75 @ \$1.80 for ground.

AMMONIUM CARBONATE, English, has met with increased attention and sales are making at 8½c.

ARSENIC, white, continues in rather light supply, and for the more popular makes 3½ @ 4c. is generally asked. Outside brands may be obtained in a limited way at 3½c.

BLEACHING POWDER is scarce and slightly firmer at \$2.25 @ \$2.50 for German and English.

BRIMSTONE, crude seconds, is dull and easy, with parcels to arrive quoted \$18 and forward shipments \$17 @ \$17.50.

CHLORATE OF POTASH is maintained at 14½ @ 14½c. for German and English crystals, and jobbing sales are making at these figures.

CALOMEL, Howard's English, has been reduced to 77½ @ 80c.

CITRIC ACID is quiet though there is seemingly no pressure to realize at anything below the net quotation of manufacturers. We quote barrels 42½c. and kegs 43c., subject to the usual discount.

CREAM TARTAR is dull, and prices are unsettled. The general asking price is 17½c. for crystals and powdered, though there are intimations of 17c. for the latter.

NITRATE OF SILVER is lower, manufacturers having reduced their selling limits to 44 @ 45½c., the inside price for lots of 1,000 ozs.

NITRATE OF SODA continues quiet and in easy market without change of note in either price or demand. Store goods held at \$1.92½ @ \$2 as to quantity. To arrive, \$1.87½ @ \$1.90.

OXALIC ACID does not develop any action of consequence; importers quote German 6½c. and English 7c.

QUICKSILVER is steady at 45 @ 46c. with moderate sales at this range.

### ESSENTIAL OILS.

ANISE continues to offer at \$1.42½ @ \$1.45, though purchases are yet confined wholly to jobbing quantities.

BERGAMOT and other Messina essences are showing a steadier appearance, the concessions granted of late bringing the cost of the goods to an unusually low point. Prime brands bergamot may be obtained to-day at \$2.25, orange \$1.50 and lemon \$1.30 @ \$1.35. Inferior goods are in abundance and offered at figures materially less, but the cheapness of the higher grades has changed the current of trade somewhat.

CASSIA is maintained at 80 @ 85c., though no special interest is displayed.

CUBEB is offered at extremely low prices, say \$1.50 up, though the demand is not stimulated by the comparative cheapness of the article.

CROTON is higher, holders now quoting 90c. @ \$1.

PENNYROYAL is dull but steady at 90c. @ \$1.

PEPPERMINT continues extremely dull. HGH is offering at \$2.80 @ \$2.85, and it is intimated that even less could be done upon a firm bid. Bulk is without quotable change.

### GUMS.

ALOE, Curacao, are offered at 2½ @ 3c., though little inquiry is experienced.

ARABIC remains quiet though steady. Reports from primary sources advise the stock remaining as consisting almost wholly of the hard amber variety. Sorts held at 10 @ 12c.

ASAFOETIDA is maintained steadily at the range of 15 @ 30c. as to quality, with a fair jobbing business at this quotation.

CAMPOR, Japanese refined, is offered upon the market in 8 lb. packages, 64 lbs. to the case, at 43c. Domestic is quoted 44 @ 45c. in barrels and 45 @ 46c. in cases. There is momentarily a very dull market.

CHICLE continues to offer at 27 @ 28c.

this range, however, rather exceeds buyers' limits.

SENEGAL and Tragacanth are without important change. Sorts of the former quoted 9 @ 9½c., and the latter 32 @ 56c. for Aleppo.

#### ROOTS.

ALTHEA, cut, is in improved position, with 18 @ 20c. generally required.

GINGER, Jamaica, new crop, unbleached, is arriving and offered at 12c. Old, well seasoned goods are now obtainable at 13½ @ 16c. Bleached is quoted 16c.

GINSENG is well contained at \$2.50 @ \$3.50 as to quality and current arrivals, which are light and taken promptly at this range.

IPECAC is firm, though inquiries are limited to small quantities. The quoted range is \$1.25 @ \$1.40.

JALAP continues dull at the range of 23 @ 27c. as to quality.

LOVAGE finds sale in a small way at the range of 30 @ 35c.

ORRIS is in better supply, and the price has yielded somewhat, good grades being obtainable now at \$1 @ 1.10.

SARSAPARILLA, Mexican, is steadily held at 9½c. There is no stock in first hands.

SENEGA is quiet, but the market is well sustained at the point of 39 @ 40c. for Manitoba and Minnesota.

SNAKE is given little or no attention; 30c. is asked for Texas. The quantity available is small.

SOULLS are quiet; supplies are obtainable at 3¼ @ 4c., which range indicates a slightly easier tendency.

#### SEEDS.

ANISE does not change from 10½ @ 11c. for Italian and 6 @ 6½c. for German.

CANARY, Smyrna, continues in good request and firm at 2½ @ 2¾c.

CELERY is unsettled; jobbing purchases can be made at 15c.

CORIANDER is in moderate demand and firm at 6 @ 6½c. for bleached and 5½ @ 6c. for unbleached.

HEMP, Russian, is dull, though supplies are offered freely in a quantity way at 2¼ @ 2½c.

MUSTARD is dull but steady. Yellow California quoted at 3½ @ 4c.

POPPY, German, is quiet at 5¼ @ 6c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED first-class salesmen to sell side line on commission; only those selling to first class trade need apply; state the line of goods now carried; samples small. Address H. T. C., care this office.

#### POSITIONS WANTED.

WANTED SITUATION by a young man 18 years of age, 3½ years' experience, in a drug store of New York City with college privileges; can furnish good reference. Address Henry Brown, care Lorenz & Koempel, Scranton, Pa.

WANTED.—A situation by a young man with 4 years' practical experience at the drug business and 2 years at soda water dispensing. Address "Sodium," care of this office.

SITUATION WANTED from May 1, 1894, by a young man, 23, with six and a half years' experience in first class city stores, registered in New York City, at present in senior class of N. Y. C. P.; speaks German and Scandinavian. Address Geo. C. Fölich, drug store 57th street and Ninth avenue, New York City.

WANTED.—A position by an all round druggist, capable of managing if necessary; best of references; registered in Texas; married; Texas preferred. Address "W.," L. Box 71, Smithville, Texas.

WANTED SITUATION, by a graduate of St. Louis College of Pharmacy also of Gem City Business College; use no tobacco or liquor; 6 years' experience; registered in Mo.; will work in the house or on the road. Address H. L. Wright, Clarence, Mo.

POSITION WANTED.—A salesman acquainted with wholesale and retail druggists to introduce some goods on small salary or commission. "Mueller," 130 Forsyth street, N. Y.

SALESMAN wishes to introduce other goods with his own line to druggists. Address "Salesman," 257 Broome street, New York.

SITUATION WANTED as drug clerk by a young man 23 years of age, with four years' experience, and junior graduate of the Ontario College of Pharmacy; best physicians' and other references; apply to O. O. Hammill, Sheffield, Ont., Canada.

WANTED.—Position by young man aged 18 to learn the drug business; industrious and willing to work; can furnish good references. Address W. H. Doolittle, Jr., 557A Monroe street, Brooklyn.

WANTED, SITUATION.—A practical and competent pharmacist, first-class worker, neat, sober and reliable, registered in Connecticut; best references. Address "C. A. P.," this office.

#### BUSINESS OPPORTUNITIES.

RARE BARGAIN in a drug business; present proprietor has other business and must close out by April 1 or May 1; first-class chance. Address Ferguson's Pharmacy, Cooperstown, N. Y.

FOR SALE.—Best drug business in northern New Hampshire; no competition; business, \$12,000; stock, \$7,500; rent, \$400; cash payment, \$5,000; balance monthly; must be sold immediately. Address R. E. George, 20 Plum street, Portland, Maine.

CYANIDE OF POTASSIUM, (98 per cent.) K. C. N.), wanted to purchase in quantities; annual consumption about 100 tons; strength must be guaranteed; quotations and terms to be addressed to "Export," care of *Deutsch Amerikanische Abotheke Zeitung*, New York.—9.

TO DISSOLVE PARTNERSHIP.—A first-class drug store is offered for sale in a growing city. For particulars address P. O. Box 1315, Meriden, Conn.—4.

FOR SALE.—Well established and profitable patent medicine business. Present proprietor wishes to retire from active business for family reasons. Address A. P. Hoxsie, Buffalo, N. Y.

DRUG STORE for sale in fast growing village in Long Island; south side; population 700; yearly business \$2,500; price if sold before Spring \$1,000; owner has another store; first-class opportunity for young doctor, single. "Ozone," this office.

THE SUBSCRIBER wishes to buy a drug store having a daily trade of \$18 or over, in a town of 8,000 or more. Rent to be not above \$40 per month, and price to run between \$3,000 and \$1,500. Location anywhere west and south of New York City. Address "Class of '93," care of this office.

I HAVE in my possession 47 numbers of THE PHARMACEUTICAL RECORDS which I wish to dispose of for fair prices, or in exchange for something. I have also about 22 numbers of *Druggists' Circulars* in good condition. Write and state price, or exchange, to "Bensonhurst," in care of this office.

FOR SALE.—One of the oldest, best located and prosperous retail drug stores in Los Angeles, Cal.; no cutting; a city rapidly growing and located in an unexcelled climate and populous territory; a rare business opportunity; owner desirous retiring from active business. Address H. K. Stockton, P. O. Box 356, Station C, Los Angeles, Cal.

## LIQUID RENNET.

This article coagulates Milk without previous preparation, being most convenient for making

### JUNKET, or CURDS and WHEY.

Made from Swiss' Rennets by a formula that many years' experience has proved reliable, and believed to be the best and cheapest in the market. Sold by leading wholesale houses in Boston, New York, Chicago, and Philadelphia, and by the manufacturer

## JAMES T. SHINN,

DRUGGIST,  
Broad and Spruce Sts.,  
PHILADELPHIA.

## Ripans Tabules.

Ripans Tabules are compounded from a prescription widely used by the best medical authorities and are presented in a form that is becoming the fashion everywhere.



Ripans Tabules act gently but promptly upon the liver, stomach and intestines; cure dyspepsia, habitual constipation, offensive breath and headache. One tabule taken at the first symptom of indigestion, biliousness, dizziness, distress after eating, or depression of spirits, will surely and quickly remove the whole difficulty.

Ripans Tabules may be obtained of nearest druggist.

Ripans Tabules are easy to take, quick to act, and save many a doctor's bill.







# American Druggist and Pharmaceutical Record.

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WHOLE No. 287.

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A. R. ELLIOTT, President.

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We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

**B**EFORE purchasing look at our latest market report. Remember it comes out weekly.

**W**HEN cutters find out these two things: first, that they cannot buy cheaper than their neighbors the retail druggists, and that they will not be allowed to sell lower, then the worst of the fight is over. If we can get together and pull together even in this large city we can get both of these facts lodged in the minds of the cutters. Dr. TSCHAPPE, who is not a visionary enthusiast, said at the League convention that he thought we could. It's worth trying.

**T**HE introduction of an amendment to the WILSON bill before its passage in the House providing for a tax of \$1 per pound on crude opium occasioned some comment at the time, and now, as reported in our drug market last week, it is claimed that the introduction of the tax was the work of a speculator who, after assuring himself of its introduction, secured an option on the bulk of the visible supply of opium abroad. This means that if the tax remains as it now stands he will be enabled to bring in a large supply of opium prior to the date of the bill going into effect and thus benefit by the difference in price between duty free and duty-paid opium. As the crop of opium does not begin to come into the market in Smyrna until the latter part of August it

is only last year's crop that the speculator needs to look out for. The advance that has already occurred has been sufficient to net a large profit to him.

**W**E take pleasure in acknowledging the courtesy shown by that representative body of pharmacists the *New Yorker Deutscher Apotheker-Verein* in tendering this journal a vote of thanks for its good offices. The best interests of the retail drug trade are the interests of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. Whatever we can do to forward the interests of that trade always will be as it always has been done, and it is highly gratifying for us to be made aware by the special vote of thanks of the Interstate League two weeks since and of the *New Yorker Deutscher Apotheker-Verein* last week that our efforts have been well directed and are appreciated.

#### WHERE THE RESPONSIBILITY LIES.

**T**HE old question of the nature and extent of the legal responsibility attaching to the druggist who negligently compounds an improperly written prescription has been revived and given fresh point in a recent number of the *International Medical Magazine*.

With most physicians it is a matter of belief that the carelessness of the druggist in failing to detect error in a given prescription makes the latter liable in damages to the injured party. That this belief does not prevail in the medical profession alone will at once occur to every pharmacist, since pharmacists themselves have been influential in spreading this impression.

In the law courts the prevailing tendency is to make all concurrent negligent agents jointly and severally liable in damages to the injured party; so that a druggist may be held jointly responsible with the physician for any negligence and damage resulting from the administration of an improperly written prescription; but the druggist alone cannot be held individually responsible.

The opinion of the court in a case recently on trial where it was sought to prove liability on the part of the druggist for the mistake of the physician is interesting in view of the differences of opinion which prevail in regard to these cases;

The action to which we have reference is commented upon at length by the legal editor of the *International Medical Magazine* as follows:

This action, which was against the physician alone, was for damages for negligence, and the complaint alleged the prescription of a "poisonous medicine, to wit, the tincture of opium, otherwise known as laudanum." The negligence which was the basis of the action consisted in improperly writing *pulv.* instead of *camph.* after *opii*. The result was that the infant for whom the medicine was prepared took it and died.

The prescription was headed "For GEORGE BAKER (baby)," and the physician testified that he had directed the family to take his prescriptions to another drug store than the one where it was filled.

The proper form for a prescription of laudanum, as the preponderance of evidence showed, is "*Tr. opii*," and the addition of *pulv.* is not used though it adds nothing to the meaning, while the addition of *camph.* does change it.

On behalf of the physician an offer was made (which the trial court refused) to prove a custom among druggists in the city of X. to the effect that where a prescription shows on its face, as this one does, that it is for a baby, such prescription would not be filled without consultation with the physician; and arguing that the negligence of the druggist, which the physician could not anticipate, was the proximate cause of the misfortune, thus relieving the physician from liability.

But the Appellate Court took a different view of the matter, and decided that, "at most, the negligence of the druggist concurred with that of the physician in producing the result, and this," as above stated, "is not a defence." "No error was committed, therefore, in refusing to admit evidence of the custom" sought to be established; and the judgment of the lower court mulcting the physician in damages was affirmed.

The court, in affirming this judgment, said, in effect, that the consequences were such as should reasonably have been foreseen, and that such slips of the pen, whereby human life is jeopardized, are inexcusable, as not showing the exercise of that reasonable degree of care which the law requires.

#### ANOTHER PURE FOOD AND DRUG BILL.

**C**ONGRESSMAN HATCH of Missouri is sponsor for a bill to prevent the adulteration and misbranding of foods and drugs and for other purposes. Although framed on the same general lines as the obnoxious PADDOCK bill it contains less objectionable features than the latter and will probably receive the support of many in

the trade who were instrumental in preventing the passage of the PADDOCK bill.

The sections of the HATCH bill applying to drugs is as follows:

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That the introduction into any State or Territory or the District of Columbia from any other State or Territory or the District of Columbia, or from any foreign country, of any article of food or drugs which is adulterated or misbranded within the meaning of this act is hereby prohibited, and any persons who shall knowingly violate any provision of this act shall be guilty of a misdemeanor, and for such offense be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or be imprisoned not exceeding one year or both in the discretion of the court.

SEC. 2. That the term "drug" as used in this act shall include all medicines for internal or external use. The term "food" as used herein shall include all articles for food or drink by man, whether simple, mixed or compound. The term "misbranded" as used herein shall include all drugs or articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement, purporting to name ingredients or substances as being contained or not being contained in such article, which statement shall be false in any particular.

SEC. 8. That for the purposes of this act an article shall be deemed to be adulterated,

In the case of drugs.

First. If, when sold under or by a name recognized in the United States Pharmacopœia, it differs from the standard of strength, quality, or purity according to the tests laid down therein.

Second. If, when sold under or by a name not recognized in the United States Pharmacopœia, but which is found in some other Pharmacopœia, or other standard work on materia medica, it differs materially from the standard of strength, quality, or purity according to the tests laid down in said work.

Third. If its strength or purity fall below the professed standard under which it is sold.

Fourth. If it be an imitation of or sold under the specific name of another article.

### "A FOOL AND HIS MONEY."

FROM the South there has come word from time to time of an ingeniously simple fraud, but one which seems to prove profitable, as the perpetrator adheres to his methods, changing his name only from time to time.

The fraud consists of the sale of six formulas for making cheap liquors, the price obtained varying from three to ten dollars in proportion to the credulity or means of the victim. The formulas are printed sometimes in red and sometimes in black ink, and the name of LEHN & FINK, or rather of LEHM & FINK, for so it is spelled, is printed on the sheets. In one copy of the circular the words "get goods at" precedes the name and address. Below we reproduce one of the circulars. In another copy the cost per gallon of each compound is added.

### Pattern of Home Industry, United States Seal.

OCTOBER 15, 1883.

#### PORT WINE.

5 gallons 95 per cent. alcohol.  
5 gallons clear water.  
2 ounces German glycerine.  
2 gallons oil of port wine.  
Shake well; add 30 gallons clear water; color to suit the eye with tincture of alonet. Shake well in rack; in 3 and 7 days ready for use.

#### HOLLAND GIN.

5 gallons 95 per cent. alcohol.  
5 ounces German glycerine.  
2 gallons oil Holland gin.  
2 gallon extract Juniper gin.  
Shake well; add 30 gallons clear water. Shake well in rack; in three and 7 days ready for use.  
LEHM & FINK,  
128 William street, New York.

#### MEADFORD RUM.

5 gallons 95 per cent. alcohol.  
5 gallons clear water.  
2 ounces German glycerine.  
2 gallons oil Meadford rum.  
Shake well; add 30 gallons clear water. Shake in rack; in 3 and 7 days ready for use.

#### CORN WHISKEY.

3 ounces tincture alonet.  
4 ounces powdered alcohol.  
1½ gallons 95 per cent. alcohol.  
Shake well; add 30 gallons clear water; shake well; let stand one week, ready for use.

LEHM & FINK,  
128 William street, New York City.

#### EYE WHISKEY.

5 gallons 95 per cent. alcohol,  
5 gallons clear water.  
2 ounces German glycerine.  
2 gallons oil rye whiskey.  
Add 30 gallons clear water; color to suit the eye with burnt sugar, 1 pound. Shake in barrel; 3 and 7 days ready for use.  
LEHM & FINK,  
128 William Street, New York City.

#### CALIFORNIA BRANDY.

5 gallons 95 per cent. alcohol.  
5 gallons clean water.  
2 ounces German glycerine.  
2 gallons oil California brandy.  
Shake well; add 30 gallons clear water; color to suit the eye, with burnt sugar, one pound. Shake in rack; in 3 and 7 days ready for use.

LEHM & FINK,  
128 William Street, New York City.

The use of the words "United States Seal" and of the name of a reputable wholesale drug firm are the only redeeming features of an otherwise stupid scheme.

In approaching his victims the operator represents himself as an agent for LEHN & FINK, and to the simple minded and frequently ignorant class selected as victims the words "United States Seal" mean quite as much as would an official document with a veritable seal of the government upon it.

Messrs. LEHN & FINK are frequently in receipt of orders for some of the ingredients directed in the formulas, and the character of the letter together with the quantities ordered generally furnishes a clue to the situation. They then answer, warning the would-be patron of the impracticability of carrying out the directions, and of the fraud that has been perpetrated.

Last summer the operator was caught by a vigorous young woman of Savannah, Ga., whom he had swindled, but he succeeded in getting free on some technical count.

It is quite likely that the purchasers of these marvelous formulas will apply to their local druggists for the materials and

thus give an opportunity for apprehending the rascal. It is largely because of the hope that this may occur that we give the matter so much prominence.

### THE MAN, THE MAID, AND THE MONEY.

FROM ECHO and NARCISUS in the Isles of Greece to SARAH BESAM and her cousin DAVID in Delancey street is a far cry in time and place, but the gods of those days were very mortal in their attributes. A touch of nature annihilates space and merely external conditions, reproducing the fragile, love-lorn wood nymph of prehistoric days in the adipose, commonplace "Eastsider" of to-day.

For Miss BESAM loved not wisely but too well her fascinating cousin DAVID, who, wearying of the incense of affection burning constantly for him on the altar of her virgin heart, sought new conquests, leaving the maiden all forlorn.

Sigh no more, ladies, sigh no more,  
Men were deceivers ever.

So this maid forlorn, after the fashion of TITANIA, sought a philter to fetch back his love. Aye, in this plain and cold *fin de siècle* she sought a love philter and was told by one versed in the Black Art that she should first give him a dollar and a cent, which were wrapped together and placed between the mattresses of the bed as a peace offering to the Devil, while the Devil's helpmate, the sorcerer, took a dollar for his own fee. His Satanic Majesty accepted the offering, leaving instructions for the maiden to purchase and drink a bottle of his, the Devil's, blood—the genuine unadulterated being obtainable only from SOLOMON BERNSTEIN, the sorcerer in the case, giving DAVID one teaspoonful. The "blood" cost \$6.65. DAVID drank it under duress, but complained that it was nasty—a thing natural, we presume, to this variety of blood.

Our disconsolate nymph next procured from the sorcerer a black fluid, and following out the directions given went out into the back yard at 2 30 in the morning in her stocking feet and splashed herself with the fluid. According to programme the moon should then have shone upon her and all her requests been granted, but it was not to be.

Alas and lack-a-day! the necromancer's art was all in vain (for the maid, not for the wizard) and the good gold with which she had crossed the sorcerer's palm weighed upon her mind, so, having lost faith, she endeavored to regain her eighty dollars.

Verily a quaint jumble of love and jealousy and ignorance and superstition.

Pharmacists may frequently avert some such serio-comic tragedy, not by merely laughing at the applicant for a love philter but by seriously and earnestly warning the would-be customer of the folly of the expectations entertained. For there are still occasional calls for "love powders" even in our city stores.

Written for the  
American Druggist and Pharmaceutical Record.

## PHARMACY UNDER THE WHITE TSAR.

BY VLADIMIR KNIPOWITSCH.

In Russia the "Little Father," as the White Tsar is familiarly termed, among the lower classes, is an influence guiding every step from the cradle to the grave. The system of paternalism which leads the *moujik* or peasant to designate the head of the government "Little Father" fosters multitudes of government officials either openly or secretly employed, the pay of which is wrung at infinite cost from a tax-ridden people.

While much has been done of late to give to the modern world some accurate idea of the nineteenth century medieval civilization I do not think that any free-born American citizen can ever fully comprehend save after personal observation or experience the extent to which government espionage is carried in Russia.

At every turn one must be provided with official documents. The fact of your birth and of your confirmation and of your attendance at school must all be officially certified to, and so of every act until the account is closed by the hand of death and the undertaker receiving all your official documents adds one more and gives you an official permit to rest in your grave.

On leaving after a four years' course at the "gymnasium," a course about equivalent to that of the average American college such as Cornell or Brown, the youth destined to become a pharmacist, enters the store of some apothecary, remaining generally at the same store for the whole of his three years' novitiate at a salary of from 15 to 20 roubles per month and board and washing. The course at the "gymnasium" includes Latin, Greek, German, French, Russian (the Slavs are great linguists), general literature, geography, mathematics, and general theoretical physics.

The *Vratchshebnoie upravlenie* or medical police board of each *gouvernie* or State keeps a record of each individual apprentice from the time he enters the store until he is buried. When he leaves the employment of a pharmacist the employer reports that fact to the *Vratchshebnoie upravlenie* stating how long the assistant has been with him and what his record has been during that time. This board then issues to the *aptekaraki uschenik* or pharmacy scholar, as he is styled, a kind of official recognition in the shape of a *conduit journal*, which the *uschenik* must preserve. When he obtains another situation he must turn in to his new employer his *conduit journal* and also a police certificate of good behavior covering the period during which he has not been employed.

When going to rent apartments in a house the first demand of the janitor is, "give me your passport"; being a scholar he must also hand him his *conduit journal*, both of which are at once registered at the headquarters of the district police. When leaving this police district he must obtain a district police certificate of habitation and good behavior and this certificate must be handed, together with the medical board's certificate or *conduit journal*, to his new employer.

After three years' practice the young pharmacist must pass an examination before the university board, which grants a certificate as *aptekaraki pomoschnik*, or, literally, apothecary's assistant.

The law requires each pharmacy to have

in it all that is necessary for the student to study for the assistant's examination, such as an herbarium, a full line of chemicals, the Russian and the Universal Pharmacopoeias and certain specified books, among which the *Aptekarski usta* or official compilation of all laws concerning pharmacy.

Such other text books as are required, as those on botany, pharmacognosy, pharmacology and pharmaceutical chemistry, must be furnished by the student himself, though it generally happens that these books will be found in the library of the employer.

The university board examinations are held every three months at all those universities which have a medical department (the medical and pharmaceutical departments are always combined). Of these there is one at Moscow, at Warsaw, at Kieff, at Dorpat, at Odessa, at Charkoff, at Tomak, and at Kazan. The medical academy at St. Petersburg is exclusively for military surgeons, who must practice in the army for at least five years after graduation; no pharmacists are admitted there.

The *uschenik* is at liberty to select any of these universities at which to appear for examination. Having made his choice he must send in a written application accompanied by an official certificate of his birth and baptism, certificate of confirmation, certificate from the gymnasium or college, his *conduit journal*, and if he happens not to have been continuously employed during his *uschenieskie godi*, or years of apprenticeship, he must also furnish police certificates of good behavior, so that the university authorities have before them a complete official record of the whole life of the candidate.

The grade of questions asked is somewhat like but still different from those of the minor examinations in England, the *staats examen* of Germany or the questions put for the degree of graduate of pharmacy at the better class of American colleges of pharmacy. They are rather more difficult than either the English or American examinations, particularly along the line of botany, pharmacognosy, and terminology.

If successful the candidate receives a diploma as assistant or *pomoschnik*, who can command a salary of 35 to 45 roubles per month and board. After three more years of practice the assistant takes up his final university course, attends lectures for two years, the sessions lasting from August till the beginning of May, his whole time being occupied for those months. During the summer the *pomoschnik* or student generally seeks and obtains employment.

After his two years at the university, if he passes the examination, he is awarded the degree of *Professorium Pharmaciensis*.

As *professorium* or full-fledged pharmacist he will receive from 75 to 100 roubles per month with board, and may begin to look around with a view to setting up in business for himself.

If studiously inclined the *professorium* may go in for study, and spending one year longer at college come up for the degree of *Magister Pharmaciensis*. For this degree he must pass an examination in higher physics and chemistry and must present and defend an original thesis, some member of the faculty being designated to oppose him.

If our *Professorium* desires to open a new store, he must first get a governmental permit, to obtain which requires considerable governmental influence and also a liberal use of money both with the local and the general medical police.

In small towns one pharmacy is allowed

for every 7,000 inhabitants, while in large cities the ratio is set as 1 to 10,000. In sparsely settled rural districts the ratio may be higher than 1 to 7,000, but the stores in this case must not be nearer each other than seven miles.

Moscow, with a population of 700,000 inhabitants, has, or did have when I was last there, 57 pharmacies, and it is here that I saw Carl Ferrierr's pharmacy, the largest retail pharmacy in Moscow, and I believe the largest in the world. There is put up there on an average 1,000 prescriptions daily.

If the pharmacist happens to have some means he may be able to purchase a store. If he does he will generally have to pay for it just double the average annual receipts of the store.

Socially, the Russian pharmacist occupies a position of some honor. By the *moujiks* or peasants he is termed *Barin*, as all people are who are above the rank of the peasant. Other customers address him as *Herr Professor*, while the peasants sometimes call him *Gaspardin Professor*. Of service in the Russian army as apothecary I may write later.

### A Lecture Experiment.

When charcoal, which has been allowed to absorb as much sulphuretted hydrogen as it can take up, is introduced into oxygen gas, the charcoal will burst into flame owing to the energy of the action of the oxygen upon the sulphuretted hydrogen.

This fact is stated in most text-books on chemistry, but no description that we have ever seen of this experiment is calculated to bring about the effect with certainty. The following is a simple method for illustrating this reaction upon the lecture table, which according to G. S. Newth (in *Nature*) is never known to fail:

A few grammes (from five to ten) of powdered charcoal are introduced into a bulb which is blown in the middle of a piece of combustion tube about twenty-five centimeters long. A gentle stream of coal gas is then passed over the charcoal, which is heated by means of a bunsen lamp until it is perfectly dry. This point may be ascertained by allowing the issuing gas to impinge upon a small piece of mirror, and when no further deposition of moisture takes place the charcoal may be considered to be dry, and the heating may be stopped. The charcoal is then allowed to cool in the stream of coal gas until its temperature is so far reduced that the bulb can just be grasped by the hand, when the coal gas is replaced by a stream of sulphuretted hydrogen. The sulphuretted hydrogen should be passed over the charcoal for not less than fifteen minutes, by which time the bulb and its contents will be perfectly cold, and the charcoal will have saturated itself with the gas. (In practice it will be found convenient to prepare the experiment to this stage, and allow a very slow stream of sulphuretted hydrogen to continue passing through the apparatus until the experiment is to be performed.) The supply of sulphuretted hydrogen is then cut off, and a stream of oxygen passed through the tube. Almost immediately the charcoal will become hot, and moisture will be deposited upon the glass. The supply of oxygen should be sufficiently brisk to carry the moisture forward from the charcoal, but not so rapid as to prevent it from condensing on the glass tube beyond the bulb. In a few moments the temperature of the charcoal will rise to the ignition point, when it will inflame and continue to burn in the supply of oxygen.

## ADEPS LANÆ.

BY FERDINAND LASCAR, PH.G.

Articles on adeps lanæ which have appeared recently in the foreign pharmaceutical press prompted me to procure samples of the product for comparative examination with the substance remaining after the removal of the water from the wool fat of the Pharmacopœsia.

I found adeps lanæ free from alkalies and fatty acids and neutral to phenolphthalein; when heated with sodium hydrate not the faintest trace of ammonia could be detected, while the amount of ash remaining after incineration did not exceed the quantity allowed by the Pharmacopœsia, the ash at the same time being free from any alkaline reaction.

The new wool fat was found to be superior in some respects to a number of the hydrated wool fats now on the market. Its melting point, for example, was lower, and all attempts to saponify it with alkalies were unsuccessful. In the Pharmacopœsia the melting point of anhydrous wool fat is stated at 40° C. (104° F.), but I found the new adeps lanæ to melt at less than 35° C.

The new product would seem to be indicated in dermatological practice where a fat of low melting point is often desired; especially where it is intended to mix an anhydrous ointment base with oils, fats, etc. Another excellent property possessed by this new product is its ability to combine with large quantities of water. It takes up nearly three times its weight of that liquid, and for this reason is splendidly adapted for salves containing saline ingredients, and for cold creams, cosmetics, and kindred cooling salves. If to this we add its elegant consistency, which makes it softer and less sticky than other products, and the fact that it is absolutely free from glycerin, we may arrive at an understanding as to why such eminent practitioners as Dr. Unna and Dr. A. Sack, of Heidelberg, speak of it so highly.

It has hitherto been a matter of exceeding difficulty to produce an absolutely pure *adeps lanæ anhydricum* from the impure article, the *œsypus* of Dioscorides and Celsus, Liebreich being the first, I believe, who succeeded in turning out a pure product.

In the *Pharmaceutische Centralhalle* G. Vulpus mentions the curious fact that certain investigators have claimed to detect free chlorine in adeps lanæ by adding nitrate of silver in alcoholic solution or an aqueous solution added to a warm solution of adeps lanæ in alcohol; but it was afterward found that the precipitate formed in this way was caused by a lowering of temperature through the addition of the cold test solution.

## Soap Formulæ.

**Sulphur Soap.**—Cocoanut oil, 1,000 parts, is saponified with 500 parts of caustic lye of 50° B., and 75 parts of sulphur.

**Camphor and Sulphur Soap.**—Cocoanut oil, 1,200 parts; soda lye of 88° B., 600 parts; potassium sulphate, 100 parts; dissolved in water, 50 parts, and 16 parts of camphor dissolved in the cocoanut oil.

**Tar Soap.**—Melt together 20 parts of cocoanut oil and 3 tar, and saponify in the ordinary way with 25 parts caustic lye of 40° B.

**Chilblain Camphor Soap.**—1,000 parts of cocoanut oil are saponified with 500 parts of caustic soda lye of 40° B., and a solution of 75 parts of camphor in 100 parts of alcohol and 50 of water stirred in.

## Pharmaceutical Progress.

**Curcin.**—A. Siegel finds in the seeds of *Jatropha Curcas*, L., a poisonous principle, curcin, which he considers analogous to ricin, and places in the class of toxalbumins (*Bot. Centralblatt*, xlvii., 120).—*Phar. Jour.*

**Bernheim's Nutritive Enema.**—The *Union Médicale* gives the following formula: Concentrated bouillon, ten ounces; pulp of boiled meat, an ounce; Malaga wine, six drachms. Such an enema, administered every three hours, it says, is sufficient to maintain nutrition.

**Green Wonder Oil?**—This was a favorite cure-all in Pennsylvania many years ago, and is prepared as follows: Venice turpentine, four ounces; sulphate zinc, fifteen grains; acetate of copper, one and one-half ounces; balsam peru, one drachm; olive oil, one pound; linseed oil, one pound. Boil the oils, add the turpentine and zinc, when warm when almost cold add the other ingredients, and stir well.

**A Toluol Thermometer.**—A toluol thermometer has been patented in Germany, of which it is hoped that it will replace both the mercury and the spirit thermometer. As with the latter, the indicating substance in the toluol thermometer can be colored with aniline; it is much cheaper than mercury, less objectionable in manufacture, and possesses five times the power of expansion of quicksilver. Toluol freezes at—50° C. and boils at 170°.

**Inertness of Quicklime.**—V. H. Velej finds that dry chlorine does not combine with dry lime, at ordinary temperatures, to form bleaching powder. No appreciable change is observable in the two substances below a temperature of 300°, when a partial replacement of oxygen by chlorine takes place; the reaction being analogous to that occurring between baryta and chlorine, not especially dried, and at ordinary temperatures (*Journ. Chem. Soc.*, cccxxiv., 1).

**An Anti-coryzal Snuff.**—M. Grellety recommends the following formula for a snuff to be employed against that common malady, a "cold in the head": Betol, 2 Gm.; 50 Ctgr.; menthol, 25 Ctgr.; hydrochlorate of cocaine, 15 Ctgr.; roasted coffee, 1 Gm.; 50 Ctgr. Powder finely, and pass through a fine sieve. M. Jullien believes the best application to be vaseline associated with boric acid, and condemns all powder, which he accuses of bringing about the concretion of the mucopurulent discharge.

**Cristalline.**—This is a kind of collodion in which the ether and alcohol are replaced by methylic alcohol as a solvent. It evaporates more slowly than ordinary collodion and forms a durable, translucent pellicle, said to be imperceptible on the skin. It has been employed in combination with various medicaments in cases of skin disease, and readily dissolves pyrogallol and salicylic acids, chrysarobin, sublimate, etc. By the addition of castor oil an elastic cristalline may be obtained as in the case of collodion.

**Rhodinol and Camphene in Essential Oils.**—Monnet and Barber have separated rhodinol, which constitutes the odorous principle of otto of roses, from the essential oil of pelargonium. The figures and reactions obtained on analysis of the compound seem to indicate its complete identity, both physically and chemically, with that from the better known source. Bouchardat affirms the existence of a dextrogyre camphene in the oil obtained from *Lavandula spica*, and Oliviero finds a similar compound in that from wild valerian

**Women as Students in Germany.**—The German universities, which have long kept their doors closed against the admission of women, are now beginning to put them ajar. The National Science Faculty of Heidelberg was the first to admit female students to its lectures, and now the faculty of philosophy of the same university has adopted a resolution that there exists no objection in principle against the acquisition by female students of the doctor's degree. The lady with respect to whose application this decision was come to will therefore be admitted to the examination.

**Indestructible Claywick.**—The *American Monthly Microscopical Journal* brings mention of a lampwick made entirely of clay giving 25 per cent. more light than cotton wick. The clay is made capillary by incorporating with it while in a plastic state filaments of unspun vegetable fiber which are burned out in the process of baking, leaving capillary tubes running longitudinally through the wick through which the oil from the lamp will be raised to the flame by capillary attraction. Owing to the perfect combustion of the wick, the flame is perfectly white in character, devoid of odor and smokeless. It is found, through a practical test, that the oil is volatilized by the use of this wick and the vapor is consumed, thus giving the above results.

**A New Sulphide of Carbon.**—A. E. Tutton describes a new liquid sulphide of carbon isolated in the laboratory of the University of Buda-Pesth by Professor von Lengyel. The liquid has a specific gravity of 1.2789, and when heated it polymerises into a hard black substance. Analyses of the liquid and solid indicate the same empirical formula,  $C_8S_8$ , for both. The liquid can be only partially distilled *in vacuo*, and in a few weeks it spontaneously changes into the more stable black solid. It readily ignites, and is dissolved by caustic alkalies, as well as by 70 per cent. nitric acid. The liquid sulphide combines readily with six atoms of bromine, and the compound formed,  $C_8S_8Br_6$ , has, curiously enough, a pleasantly aromatic odor.—*Nature*.

**Bulgarian Rose Oil.**—Markownikoff and Reformatsky (*Journal für Prakt. Chem.* 48, 1898) give the following noteworthy results of an investigation on the chemistry of this body. The chief constituent of the elaeopten in rose oil is an alcohol of the formula  $C_{15}H_{30}O$ . It belongs to the series of the allyl alcohols, and is isomeric with allyldipropyl carbinol (boiling point 192°) and allylpseudodipropyl carbinol (boiling point 169°–171°). It forms an acetic ester  $C_{15}H_{30}O.CH_3.CO$ , which occurs as a colorless liquid, with no similitude to rose oil in taste. A determination of the molecular refraction shows the necessity for the presence of a doubly linked carbon atom, and two atoms of bromine are also taken up easily. By oxidation with potassium permanganate, a trihydric alcohol,  $C_{15}H_{31}(OH)_3$ , is formed, together with its acetic ester, a yellow liquid insoluble in water, and soluble in alcohol and ether, while the alcohol is a very thick viscous substance resembling glycerin, easily soluble in water, less so in alcohol or ether. The stearothen, prepared in a pure state by repeated recrystallization from 98 per cent. alcohol, is a solid, with a melting point of 36°–5, and a boiling point of 350°–380°. Elementary analysis and a determination of molecular weight by Raoult's method show that the body is a hydrocarbon of the fatty series of the formula  $C_{15}H_{30}$ . It occurs in glassy white crystalline tablets



**Testing Red Oxide of Mercury.**—M. G. Patein (*Journ. de Phar.*) finds that certain samples of commercial red oxide of mercury contain traces of metallic mercury and mercurous oxide, due to the employment of too much heat during the process of oxidation. These impurities may be detected thus: On porphyrizing, the color should not change, and on adding to 1 part of the oxide in a test tube 20 parts of distilled water, and then gradually drop by drop hydrochloric acid until the oxide is dissolved, the solution should be perfectly clear and limpid; if the oxide has been partly decomposed the solution will not be complete, the insoluble residue consisting partly of metallic mercury in a finely divided state, and partly of mercurous chloride, formed from the mercurous oxide present.

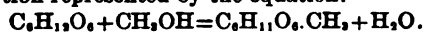
**Phenol Sodique.**—According to the *New Idea* there is considerable difference in the composition and proportional parts of the ingredients according to the N. F. formula and the reputed formula for the proprietary article called phenol sodique, which is a synonym for solution of carbolate of sodium, N. F. (*Liquor Sodii Carbolatis*). The proprietary article is a dark colored, almost black, thin liquid, sp. gr. 1.015, and alkaline in reaction. According to Mr. Geo. M. Berringer (*Phila. Col. Ph. Proc.*) it contains 66 per cent. of tarry matters and about 1 per cent. of phenols which are not separated upon diluting with water; it also contains about 1.5 per cent. of soda. The following formula he says, yields a preparation essentially the same.

Coal tar.....	2 troy ozs.
Caustic soda.....	120 grains
Water q. s. to make.....	19 fl. ozs.

Dissolve the soda in 4 fluid ounces of warm water, add the coal tar, and thoroughly agitate for a few minutes. Then add the remainder of the water and set aside in a covered vessel in a warm place, frequently agitating for seven days. Decant and filter.

It will be seen that the above formula is represented by 10.8 per cent. of coal tar, 1.44 per cent. of caustic soda, and about 87½ per cent. of water, whereas the N. F. formula contains 50 per cent. of carbolic acid, 3½ per cent. of caustic soda and 46½ per cent. of water.

**Glucosides of the Alcohols.**—E. Fischer (*Berichte Phar. Jour.*) has observed that when a solution of grape sugar in methylic alcohol is saturated with hydrochloric acid gas it loses the power of reducing Fehling's solution, and a crystallizable product is formed, having the composition  $C_6H_{11}O_6 \cdot C_2H_5$ , as the result of a reaction represented by the equation:



The same reaction takes place with all kinds of alcohols capable of dissolving sugar, and the compounds formed correspond to natural glucosides. They are not altered by Fehling's solution, phenylhydrazin, or boiling potash solution, but when boiled with dilute acid they assimilate water, and are converted into sugar and alcohol. Some of these artificially produced glucosides have a sweet taste and others a bitter taste. It is not improbable, therefore, that some natural glucosides may be compounds of the same kind.

**Lanolin in Extinguishing Mercury.**—Ernest Buch says (*Pharm. Zeit.*) that in anhydrous lanolin we possess a substance with whose help mercury can be quickly and easily extinguished for the preparation of mercurial ointment. He proposes the following formula for the preparation of mercurial ointment:

	Parts.
Mercury.....	1,000
Anhydrous lanolin, or wool-fat.....	250
Hog's lard.....	1,140
Mutton tallow.....	610

It is better to have the lanolin not too cold and hard, it is best at about the temperature of the room. All the quicksilver is operated on at once. An extinguished mercury (*Hydrargrum extinctum*) is on the market made by Dieterich 400 Gms. of which contain 384 Gms. of mercury. Such a preparation may be made using lanolin alone.

**Distinctions between Catechu and Gambier.**—Gibson points out how catechu from *Acacia Catechu* and that (gambier) from *Uncaria Gambier* may be distinguished by microscopic examination. Depending upon the fact that the latter is prepared from young stems bearing leaves and flowers, while the black catechu is obtained from the duramen or inner wood of the trunk, he seeks for the different anatomical elements accidentally present in the extracts. The material is dissolved by means of alkali or thirty per cent. acetic acid, and the insoluble residue is then submitted to careful examination. In that from black catechu, woody fibers and large pitted vessels may be detected, and sometimes hairs from the leaves in which the extract has been wrapped, but never any dissociated parenchymatous cells, such as are found in the residue from gambier, in which hairs from the calyx and corolla of the flower of *U. Gambier* may also be distinguished.—*Répert.*

**New Isomer of Cinchonine.**—Jungfleisch and Légar describe a novel isomer of cinchonine, which they name *cinchonine s*. It is obtained by continued boiling of an alcoholic solution of dibromhydrate of hydrobromocinchonine and subsequent separation from the other bases present. When slowly crystallized from ether it forms long prisms, which are insoluble in water, but freely soluble in alcohol, benzoin, chloroform, acetone. The base melts at 150°, and is dextrogyre; its rotatory power, measured at 17°, being  $\alpha_D = +125^\circ.2$ . It forms a hydrochlorate and hydrobromate, which each occur as small prisms, and contain 1.5 and 2 molecules of water respectively; and an oxalate containing five molecules of water of crystallization, which forms five needles. Solutions of cinchonine *s* or of its salts become colored rapidly on exposure to air and light, the brown colored products of the change being much less alkaline than the base itself (*Comp. rend.*, cxviii., 29).

**Eurybia** is a glucoside from the *Eurybia moschata*, a member of the family of compositae which is found in New Zealand. Merck describes it (*Berichte*) as an amorphous, pale yellowish, bitter powder clearly soluble in water and in wine. The aqueous solution is not rendered cloudy by neutral though it is precipitated by basic lead acetate. Tannin produces a flocculent precipitate which on agitation rapidly agglomerates into a resin which after freeing from water is completely soluble in alcohol. On heating with Fehling's solution no reduction occurs. On saponification with 5 per cent. sulphuric acid a resin separates which is fully soluble in alcohol. The aqueous solution reduces Fehling's solution, an indication that eurybin is a glucoside. Dr. Kobert has conducted some experiments as to the physiological action which showed that the glucoside affected warm blooded animals when administered internally only when given in relatively large doses. 0.7 grm. administered internally to a strong cat caused repeated vomiting followed by recovery. For frogs a dose of 0.05 grammes proves toxic.

**Sublimate Solutions.**—Vignon points out that the antiseptic value of aqueous solutions of corrosive sublimate depends upon their preservation in an unchanged condition, and he is of opinion, after performing numerous experiments and calculations, that great changes in strength may take place on keeping, an insoluble precipitate being gradually deposited. The presence of hydrochloric acid or of alkaline chlorides retards this process considerably, and coloring matters such as indigo-carmin and fuchsine appear likewise to exert a preservative influence. Tanret, criticising these results, considers that the precipitate of mercury amido-chloride is caused by ammonia vapor in the atmosphere, independent experiments having convinced him that mere exposure of aqueous sublimate solutions to the air causes no such change (*Comp. rend.*, cxvii., 793 and 1081).

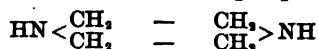
**Localization of Active Principles.**—L. Braemer (*Comp. Rend.*, cxvii., 758) has made a microchemical examination of the *Bryonia dioica*, *Citrullus Colocynthis*, and *Eoballium Elaterium* (Cucurbitaceae), with a view to localizing the bryonin, colocynthin, and elaterin present in their tissues. The color reactions given by these compounds with sulphuric acid (pure or combined with phenol), ammonium molybdate or vanadate, and silver nitrate, were utilized for this purpose. In the case of bryony and colocynth, the material was preserved in ether, in which the respective active principles are insoluble. The reagents were not applied direct, but placed at the edge of the cover glasses over the sections and allowed to penetrate by capillary attraction. In the elements of the tissues containing the active principles the presence of the latter was clearly indicated by a red coloration, and longitudinal sections made through the different organs of the plants showed that these elements correspond to the sieve tubes described by Fischer as having ceased to exercise their special function and lost their typical structure. In the three species examined these vessels occupied chiefly the periphery of the liber, but they were also found in the cortical parenchyma, the pericycle, and the fundamental parenchyma.

**Tests for Europhen.**—The German Pharmacopoeia Commission state as a test for the purity of europhen, that when europhen is agitated with water and silver nitrate added to the filtrate should not show cloudiness. According to this test all europhen would have to be refused which was not indifferent to silver nitrate solution. Dr. Felix Goldmann pointed out some two years ago, however, that europhen contains traces of free iodine, and that on contact with water water-soluble organic compounds were formed. Every sample of europhen after it had been mixed with water would, therefore (though not after, merely agitating) yield a filtrate which reacts upon silver nitrate. These are not impurities but merely substances which serve to aid in the efficacy of the product. Dr. Goldmann therefore proposes the following test: To identify europhen boil it for ten minutes in alkaline solution with zinc dust and thus split up into its components. Dilute, filter, add an excess of acid to the filtrate and agitate with ether. Estimate the iodine in the aqueous solution in the usual manner. Drive off the ether from the ethereal solution, take up with a little soda solution diluted with water and add iodine and potassium iodide solution or what is better iodine in the nascent state, potassium iodide and sodium

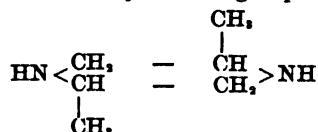
hypochlorite. Europhen is thus regenerated and may be identified by the precipitate that forms, greenish at first, and later yellowish, and by the characteristic odor.

**Chloralose and Parachloralose.**—In a supplementary communication regarding these substances (see *Pharmaceutical Record* [9], xv., 157) Harriot and Richet describe the first named as slightly soluble in water and in ether, more so in alcohol, and melting at 187°. The aqueous solution does not reduce silver nitrate nor Fehling's solution even when boiling. Dilute acids fail to decompose it, and nascent hydrogen is also without action upon the solution, but alkalis color it brown on warming. Concentrated acids or their chlorides act upon chloralose, forming di- and tetra-substituted ethers. Tetracetyl-chloralose,  $C_8H_7Cl_4O_2(C_2H_5O_2)_4$ , melts at 145°; tetrabenzoyl-chloralose forms prisms which fuse at 138°. By oxidation chloralose is converted into chloralic acid,  $C_2H_3Cl_3O_4$ , with loss of carbon dioxide. The acid crystallizes in anhydrous needles, which fuse at 212°, are soluble in alcohol or ether, and slightly so in water. All these derivatives of chloralose are physiologically inactive. Parachloralose is distinguished from the former compound by its insolubility generally; it melts at 227° and sublimes if heated gently. Alkalis attack it on boiling, but not powerfully. Like chloralose, it is unaffected by hydroxylamine, phenylhydrazine, and dilute acids, and it gives di- and tetra-substituted ethers under similar conditions. Tetracetyl-parachloralose,  $C_8H_7Cl_4O_2(C_2H_5O_2)_4$ , occurs as long needles, melting at 106°, and boiling near 250° under a pressure of 25 mm. It can be distilled at the ordinary pressure, but is colored yellow during the operation. Tetrabenzoylparachloralose has not yet been obtained in the crystalline state. By oxidation of parachloralose, parachloralic acid  $C_2H_3Cl_3O_4 \cdot 2H_2O$  is formed and  $CO_2$  is given off. This acid melts at 203°, is slightly soluble in cold water and very soluble in alcohol or ether. It crystallizes in efflorescent tablets (*Comp. rend.*, cxvii., 784) *Phar. Jour.*

**Lycetol.**—Under this name a body, which may be represented as dimethylpiperazine tartrate, has been introduced for therapeutic use by Bayer & Co., of Elberfeld (*Apoth. Zeitung*). It is described by Hermann Wittzack in the "Allg. Medizin Central Zeitung" as having little action upon the human organism, but as having at least the same solvent action on uric acid as piperazine itself. It is stated that the administration of lycetol is followed by considerable increase of diuresis, with reduction of the specific gravity of the urine. Long continued use of this substance does not produce any disturbance of the system, but gouty symptoms are relieved by it. Thoms points out that, regarding piperazine as constituted of two ethylene residues united by two NH groups:



or as diethylenediamine, the base in lycetol may be represented as constituted of two propylene residues united in a similar manner by two NH groups:



or as dipropylenediamine, dimethylpiperazine being derived from propylene in the same manner that piperazine is derived

from ethylene. Many years ago the mode of producing these diamines was shown by A. W. v. Hofmann, and the dipropylene compound has since been prepared by H. Strache according to Hofmann's method, but the yield obtained was small. The *Pharmaceutical Journal* thinks it is probable, therefore, that Bayer & Co. have found a more advantageous mode of production.

**Methylamine and Ethylamine.**—A new mode of preparing methylamine and ethylamine, based upon the reduction of the remarkable ammoniacal compounds of formaldehyde and acetaldehyde, is described by MM. Trillat and Fayollat in the current issue of the *Bulletin de la Société Chimique (Nature)*. When aqueous solutions of formaldehyde and ammonia are mixed a compound is formed the decomposition of which has been given by several chemists as  $N_2(CH_2)_6$ . By the direct union of equal molecules of formaldehyde and ammonia the substance  $CH_2 : NH$ , methylene imide, is supposed to be produced, two molecules of which then combine with another molecule of formaldehyde to produce the

compound in question  $CH_2 < \begin{array}{c} N : CH_2 \\ | \\ N : CH_2 \end{array}$ ,

with elimination of a molecule of water. This substance is rapidly broken up upon treatment with zinc dust and hydrochloric acid, and subsequent addition of caustic alkali, with liberation of methylamine. It is probable that four atoms of hydrogen are taken up during the reduction, thus fully saturating the molecule and

forming the compound  $CH_2 < \begin{array}{c} NH \cdot CH_2 \\ | \\ NH \cdot CH_2 \end{array}$ ;

this latter substance then becomes converted into formaldehyde and methylamine by assimilation of water during saponification with alkali. In order to prepare methylamine it is unnecessary to isolate the ammoniacal compound; formaldehyde and ammonia are simply mixed and immediately treated with zinc dust and dilute hydrochloric acid. The liquid is then saturated with caustic alkali, and the methylamine, together with excess of ammonia, expelled by a current of steam and received in dilute hydrochloric acid. Upon evaporation of the acid solution a mixture of sal-ammoniac and methylamine hydrochloride is left, and the latter may readily be extracted by absolute alcohol. A second distillation of the methylamine hydrochloride with caustic alkali yields pure methylamine. Ethylamine may be similarly prepared by reduction and saponification of the well-known compound of acetaldehyde and ammonia.

**Adulteration in Canada.**—A bulletin has been issued by the Inland Revenue Department of the Canadian Government dealing with analysis of pharmaceutical tinctures.

Mr. MacFarlane, chief analyst, says that a considerable number of samples were found to be deficient in alcoholic strength, and it is reasonable to suppose that, as a consequence, they are defective as regards the extract they should contain and the medicinal properties they should possess. According to the Adulteration Act every drug must be regarded as adulterated within the meaning of the Act, "if, when sold, or when offered, or exposed for sale, under or by a name recognized in the British or United States Pharmacopoeia, it differs from the standard of strength, quality or purity laid down therein." The following statement shows the number of cases challenged, and the

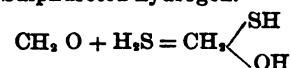
manner in which they have been disposed of up to the present.

	In Quebec.	In Montreal.	In Ottawa.	In Toronto.	Total.
Challenged .....	5	7	6	9	27
Relieved on appeal.....	x	..	4	1	6
Relieved on payment of expenses.....	4	5	..	5	14
Settled on payment of these and the expenses of prosecution.....	..	..	2	1	3
Non-suited.....	..	x	..	..	1
Judgment obtained.....	..	..	..	2	2
Still in litigation.....	..	x	..	..	1
Totals.....	5	7	6	9	27

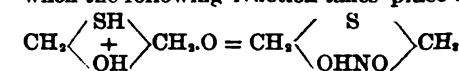
**A Test for Europhen.**—This recently introduced synthetic remedy can be detected by reduction by means of zinc dust, which liberates iodine. The mass is treated with water and filtered; and excess of acid added. It is then shaken with ether. The ethereal solution can now be dried, the residue redissolved in water and treated with nascent iodine (KI and Cl), when europphen is regenerated.—*Pharm. Zeitung*.

**Formalin.**—A report of great novelty and interest on the efficacy of this new disinfectant has just been published by Dr. Schmidt, (*Char. Zeitung*). The lines on which the work embodied has been undertaken are purely scientific, and of such a character as to insure its real value, although it emanates from the firm interested in the sale of the disinfectant. The action of formic aldehyde, the chief constituent of formalin, on the various offensive faecal principles has been carefully studied, with the following results:

1. Sulphureted hydrogen.

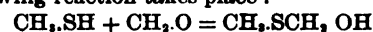


The thio-alcohol produced, however, has a mercaptan-like odor, hence it is better to employ excess of formic aldehyde, when the following reaction takes place:



The new body has very little odor.

2. Methyl mercaptan. The smell of faeces is, according to Nencki and Sieber, largely due to this sulphur compound. The following reaction takes place:



3. With ammonia and basic compounds formic aldehyde at once forms odorless compounds. Dr. C. Gegner some months ago pointed out that not only do formalin solutions exercise a bactericidal action, but formalin vapor is powerfully antiseptic and affects the melting of gelatin exposed to it. Dr. G. Hauser, referring to this communication, shows that such gelatin cannot be liquefied, even by the heat of a bunsen flame or on boiling in soda solution. Being strongly antiseptic, too, no organisms will grow upon it. He takes advantage of these peculiarities in preparing colonies of bacteria for microscopic examination. A thin film of gelatin, in which a particular growth is present, is placed on a glass slide, covered with thin glass, and the cover sealed by a ring of melted gelatin. The preparation is then exposed to formalin vapor for twenty-four hours, after which the gelatin is quite solid and unalterable. By previously immersing the gelatin film in weak aqueous fuchsine solution, the bacteria are stained sufficiently to contrast with the surrounding medium, which is much more faintly colored.—*Pharm. Jour.*

## Formula for Making and Coating Glycerin Suppositories

By C. S. BONDURANT.

Sodium carbonate crystal..... 1 part  
Stearic acid (dry)..... 2 parts  
Glycerin..... 3 parts

Powder sodium carbonate and stearic acid finely, mix with the glycerin in evaporating dish, place on a water bath, and continue heat until effervescence ceases and complete solution is effected.

Pour into cold, dry molds, and, when congealed, cut off, and insert into one end a long needle, dip quickly into melted paraffin for an instant, cool quickly, take out the needle, stop the hole by gentle pressure, keep in glass-stoppered bottles.

## The Tests for Chloroform.\*

By D. B. DOTT, F.I.C., F.R.S.E.

In view of the fact which has recently been authoritatively announced, that a new pharmacopoeia is to be produced before long, it seems an appropriate time to bring forward anything one has to say on the above subject. Although no discoveries of any importance regarding chloroform have been made since the compilation of the last pharmacopoeia, there will be a general consensus of opinion that the characters and tests require some revision.

First, as to specific gravity. From my own experience, and from a series of experiments lately tried in the laboratory, I am clearly of opinion that the specific gravity should be reduced. This opinion is in harmony with the results obtained by Biltz and Schacht.† It is also the opinion of Dr. Squibb, who has given great attention to the matter, and was the first to observe the restraining influence of alcohol on the decomposition of chloroform. Dr. Squibb maintains‡ that chloroform should not have a higher density than 1.494, and preferably that it should be 1.490. Chloroform which has been reduced to sp. gr. 1.490 will resist decomposition better than chloroform of 1.497 sp. gr. Chloroform of 1.497 may resist decomposition when kept with all known precautions, but experience does not justify the belief that the users of chloroform can be relied on to adopt these precautions. And if a lower specific gravity is desirable in this country, it is even more desirable in tropical regions, and that is an important point to be considered in drawing up an Imperial Pharmacopoeia. The specific gravity had best be stated as of 1.490 to 1.495. That allows a reasonable margin of variation, a custom which should be as a rule adopted both in stating percentages and densities. It would be more satisfactory both to manufacturers and analysts.

Secondly, as to the color yielded to sulphuric acid. The purpose of this test is a good one, but it must always be used with discrimination, because, as formerly pointed out, the coloration may be due simply to a trace of oil derived from luting, or to resin dissolved out of the cork.

Thirdly, as to a test for carbonyl chloride, etc., in other words, a test to show whether chloroform has undergone appreciable decomposition. Although it has been well known for many years that chloroform is, under certain conditions, liable to decomposition, and that the fact of its having decomposed can be easily

ascertained by tests, it so happens that there is no such test in the present pharmacopoeia. It seems to have been pretty well ascertained that the chief products of decomposition are carbonyl chloride, hydrochloric acid, and chlorine, although there is also secondary reaction on the alcohol present, giving rise to ethyl chloride and other compounds. The tests I have employed to detect decomposition in chloroform are moist litmus paper and solution of silver nitrate. I do not think there is the least question that these are the best and most satisfactory tests. I have not found baryta water at all so satisfactory. A trace of carbonic acid will cause a minute precipitate, which it would be very rash to conclude was due to carbonyl chloride, and altogether the test is more open to misconception, and of course does not react with hydrochloric acid or chlorine. There does not appear to be any advantage in introducing a test specially for the purpose of detecting free chlorine. I have not determined the limit of delicacy of the silver nitrate reaction, but the following experiment may be regarded as practically conclusive. One volume of decomposed chloroform was diluted to 100 volumes with pure chloroform, which gave no reaction with silver nitrate. The mixture was then shaken up with nitrate of silver solution and gave at once a well marked turbidity. I would therefore suggest that the tests for chloroform might be as follows:

### CHARACTERS AND TESTS.

A dense liquid of characteristic odor. Specific gravity 1.490 to 1.495. On allowing  $\frac{1}{2}$  fl. drm. to evaporate from a clean surface, no foreign odor is perceptible at any stage of the evaporation. When 1 fl. drm. is agitated with an equal volume of solution of silver nitrate, no precipitate or turbidity is produced after standing for five minutes. On shaking up the chloroform with half its volume of distilled water, the water should not redden litmus paper. When shaken with an equal volume of sulphuric acid, little or no color should be imparted to the acid.

## Experiments with Liquid Air.

Professor Dewar, of London, has delivered another of his interesting lectures on liquid air.

To the majority of people liquid air is only a scientific marvel, to a few it presents a collection of unsolved and most interesting problems, while at the Royal Institution it has become a valuable instrument of physical research. Produced in large quantities and stored by novel and ingenious methods, it is employed in the study of matter at 200° below zero, exactly as a spirit lamp or a gas flame is used in studying the properties of different bodies at temperatures equally removed in the opposite direction from the normal. Professor Dewar's lecture dealt in part with some properties of the liquid itself which has not previously been studied in equally favorable conditions, but was more particularly concerned with indicating the various important applications of a new and potent instrument of physical investigation.

Professor Dewar carried out a very simple but very striking experiment which forcibly demonstrates the truth of the molecular theory. He took a high vacuum bulb containing only a minute quantity of mercurial vapor, to which was connected by a short neck of from a tenth to an eighth of an inch bore a smaller bulb containing liquid mercury. On applying liquid air to a portion of the larger bulb,

the contained vapor was at once condensed as a small mirror. On applying the liquid to a second portion of the glass no further condensation was obtained thus proving that the metallic surface a couple of inches below could not supply vapor to replenish the larger bulb. But on inclining the apparatus so as to pass a globule of mercury into the larger bulb itself the cold spots on the glass were instantaneously covered with dense metallic deposits. Of the myriads of molecules projected in all directions from the liquid mercury in the smaller bulb only a small percentage—which might be determined by the theory of probabilities—struck the orifice of the neck in such a way as to shoot clean through into the larger bulb. Hence the loss from condensation could not be made good although there was free communication with another chamber containing vapor at a relatively high pressure.

## Incompatibility.\*

JAMES KENNEDY, PH.G., M.D.

Professor of Pharmacy, University of Texas.

By the term incompatibility we mean that property possessed by certain bodies which renders them uncongenial to certain other bodies, and occasions a change in either one or both substances affecting either their physical or chemical constitution when brought into contact with each other. This definition applies to chemical and physical incompatibility.

We may study our subject under four different heads, as follows: 1. chemical; 2. physical; 3. pharmaceutical; 4. physiological.

**Chemical Incompatibility.**—Substances are said to be chemically incompatible when they react upon each other in such a way as to produce a new compound occasioning changes in the atomic structure of both. Acids and alkalis are incompatible, for the reason that there exists an affinity between them sufficiently strong to cause them to unite chemically. Their atoms enter into a close chemical union, and produce a new substance which possesses properties differing widely from either of its constituents.

If common bread soda (soda bicarbonate) is added to muriatic acid, we will find that the mixture will effervesce, owing to the escape of carbonic acid gas ( $\text{CO}_2$ ). The resulting solution no longer possesses the characteristics of either the acid or the soda, and by evaporation of the solution we obtain the product of their union, which is common salt. The muriatic (hydrochloric) acid being composed of hydrogen and chlorine ( $\text{HCl}$ ), the soda of sodium, and carbonic acid ( $\text{CO}_2$ ) (having the composition of  $\text{Na}_2\text{CO}_3$ ), double decomposition ensues, the sodium ( $\text{Na}$ ) uniting with the chlorine ( $\text{Cl}$ ) to form sodium chloride ( $\text{NaCl}$ ), the hydrogen with a part of the oxygen to form water ( $\text{H}_2\text{O}$ ), and the carbonic acid gas escapes ( $\text{CO}_2$ ).

Another instance of chemical incompatibility, and one which will serve to illustrate the importance of a knowledge of the subject to both pharmacist and physician, is the changes occurring on the admixture of calomel (mercurous chloride) ( $\text{HgCl}_2$ ) with muriatic acid. The acid nearly always containing free chlorine, the mercurous chloride takes up another atom of chlorine from the acid, and is converted into mercuric chloride, or corrosive sublimate, a compound differing greatly from calomel, both in its chemical constitution and physiological effect, the

\* Read before the Edinburgh branch of the British Pharmaceutical Society.

† *Pharm. Journ.* (3), xxiii., 1,005.

‡ *Pharm. Journ.* (3), xxiv., 92.

\* Lecture delivered before the medical and pharmaceutical students of the University of Texas, and communicated by the author.

former being a relatively harmless cholagogue, while the latter is a powerful alterative in small doses, and a violent corrosive poison when taken in large amounts. \* \* \*

Among the common errors that physicians make as pertains to compatibility in prescriptions are the following: Ammonium carbonate with syrup of squill in cough mixtures. These two substances are incompatible, for the reason that the syrup contains an acid (acetic) which acts chemically upon the ammonium salt, decomposing it with the formation of ammonia acetate. Tannic acid is sometimes prescribed in combination with tincture chloride of iron with the view of increasing the astringency of the mixture. The result is that an inky mixture is formed by the union of the tannic acid with the iron, which, in addition to producing an unsightly preparation, possesses less astringent power than was formerly possessed by either one of the constituents of the prescription. The same result will obtain if we combine preparations of iron with fluid extracts or tinctures containing tannin. Most vegetable substances contain tannin in greater or lesser amounts; therefore, if it is desired that iron should be combined with the active principle of the plant, the vegetable preparation should first be detannated; that is, have its tannin removed by the process of precipitation with the white of an egg. The tannin combines with this form of albumen and produces an insoluble compound which may be separated by filtration, leaving the liquid entirely free from its presence. The iron may then be added without producing any discoloration. There are a few drugs, such as gentian, calumba and capsicum, which do not contain any tannin, and may be combined with the salts or iron without producing any discoloration.

Iodide of potassium is frequently prescribed in solutions containing spirit of nitrous ether, and in the majority of instances a discoloration of the mixture results in a short time. This discoloration will not occur if the nitrous ether is perfectly fresh and pure. If, however, a slight decomposition has resulted, and owing to the facility with which decomposition occurs in this compound when exposed to light and air the preparation is seldom found pure on the apothecary's shelf, and may be safely set down as not being a good thing to prescribe in this form of combination. The discoloration which is produced is due to free iodine, resulting from the decomposition of the potassium iodide by acetic acid contained in the nitrous ether as a product of its decomposition under the influence of light and air.

Nitrous ether is often prescribed in combination with antipyrine, but these substances are incompatible in a high degree. The speaker was the first to call attention to the incompatibility of these substances, and in a paper which appeared in THE PHARMACEUTICAL RECORD, of New York, he published his researches on this subject. In a later and more exhaustive research conducted by him on antipyrine the resulting compound was studied both chemically and physiologically (see proceedings of Texas State Pharmaceutical Association, 1889), and the influence of the changes in the substances due to the chemical decomposition as affecting their medicinal value was determined. The conclusions were to the effect that the new compound formed is not poisonous, and practically inert; that both the spirits of niter and antipyrine have their medicinal value lessened in proportion to the amount of each suffering decomposition. A mixture of antipyrine and nitrous ether will deposit green crystals if allowed to

stand, providing there is not sufficient water present to keep the new substance in solution.

Acetate of lead and sulphate of zinc are frequently ordered in combination for use in the treatment of inflammatory affections of the genital mucous membranes, under the impression that the constringing power of these drugs is enhanced by so doing. This is a mistake. Double decomposition occurs when these two salts are dissolved together; sulphate of lead is precipitated as an inert substance, while the acetic acid is transferred to the zinc to form zinc acetate.

Strychnine is sometimes prescribed in combination with the bromides or iodides. This is a dangerous practice, for the reason that if the mixture has been allowed to stand for some time the bromide or iodide of strychnine will crystallize and be deposited in the bottom of the vial, and as the last dose of the medicine is taken the greater portion of this powerful drug contained may be swallowed, and perhaps with fatal results.

Illustrations of chemical incompatibility might be multiplied *ad infinitum*.

The following rules should be borne in mind:

Acids should never be prescribed with alkalies or their carbonates.

Alkaloids should never be prescribed in combination with alkaline carbonates.

Salts of the alkaline earths, i.e., magnesium, calcium, barium and strontium, should not be prescribed with soluble carbonates, tartrates or oxalates and in the case of the three latter elements they should never be combined with soluble sulphates, phosphates, arsenates, phosphoric or sulphuric acids.

The heavy metals, such as iron, manganese, lead, mercury, silver and zinc, should never be prescribed in conjunction with the alkalies, their carbonates or oxalates.

Silver should never be prescribed in combination with chlorides, bromides, iodides or hydrochloric acid or organic matter (substances of vegetable or animal origin).

The soluble salts of lead should never be combined with chlorides, hydrochloric, hydrobromic, hydriodic or sulphuric acid.

It is impossible to tabulate in a lecture of this kind the various incompatible combinations and mixtures, nor would such a tabulation be of any considerable use to either physician or pharmacist. An intimate knowledge of the chemical nature of the substances dealt with is the only infallible guide, the only beacon that can be relied upon to guide us safely past the treacherous shoals of this formidable gulf.

**Physical Incompatibility.**—By physical incompatibility we mean that property possessed by certain substances which causes them to change their physical properties when brought in contact with each other without affecting their chemical composition, a quality that in many instances may be overcome by the exercise of pharmaceutical skill. For instance, oils are physically incompatible with water (because of a lack of adhesion) and aqueous mixtures, but by the intervention of some viscid substance, i.e., gum acacia, they may be rendered miscible in all proportions. Solutions of resinous drugs are physically incompatible with aqueous solutions, but by the intervention of some saccharine or mucilaginous material many resins may be rendered quite homogeneous.

**Pharmaceutical Incompatibility** is represented by that class of substance

which by virtue of possessing some property or properties that occasion an undesirable change when brought in contact with each other, and which cannot be overcome or prevented by the exercise of pharmaceutical skill. Of course, in this class of incompatibles we may have the occurrence of either physical or chemical change; for instance, when two or more salts are ordered in powders, and the water of crystallization of one is absorbed by the other, with the effect of liquefying the powder. Strongly alcoholic solutions are incompatible with syrups, for the reason that the sugar is very much less soluble in such media, and in the course of several hours a considerable proportion will be found deposited in the bottom of the bottle, making a very unsightly mixture.

A prescription may be said to be pharmaceutically incompatible when an amount of a given salt which is in excess of its solubility is ordered dissolved in the liquid.

Physiological incompatibility is the property possessed by one medical substance of neutralizing the therapeutic effect of some other remedy. Medicines possessing this property should never be ordered in combination.

In conclusion, gentlemen, I will state that I have not told you all that you should know concerning this very important subject, but I hope the suggestions which I have given may be fixed upon your memory by the illustrations you have seen this morning, and will incite you to a more exhaustive study of the subject.

When the physician has learned to write compatible prescriptions, and the pharmacist has so mastered his calling that he can dispense the same in a reliable, palatable and slightly form, then will the occasion for mutual criticism have disappeared and given place to mutual respect.

### Interchange of State Certificates.\*

An ably written article some time ago appeared in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD from my colleague, H. R. Slack, of Georgia, in which he justly criticised the action of some State boards for the refusal to exchange certificates of registration with sister boards, on the plan suggested by the secretaries' meeting held in New Orleans.

Immediately after said meeting the Missouri Board resolved to accept these suggestions, and has since recognized certificates of every board which reciprocates this courtesy on that plan.

The experience I had, however, with a licentiate of a board that, as it claims, is not permitted to exchange, I will relate below. In the earlier part of September last a Mr. S— presented his certificate, granted by one of the New England States, upon examination, and requested our "interchange" by virtue thereof. I informed him that a written testimony of the secretary of the — board was required, stating the percentage he obtained, and if this was not less than 65, his request would be complied with. This testimony was not produced in due time, and Mr. S— appeared for examination at the meeting of the Missouri Board, October 9. The following are his written answers to part of the ten questions submitted to him:

Question—Write in full the meaning of the following abbreviations: Ad.; answer, add. 1. a., answer —; consp.; answer,

\* Letter of F. W. Sennewald, Secretary of the Missouri Pharmacy Board, in *National Druggist*.



Tere., answer, 3 times. Q. L.; answer,  $\frac{1}{4}$  pound. Haust.; answer,  $\frac{1}{4}$  pound.

Question—How is crude spirits or high wine deprived of the fusil oil it contains? Answer—By placing in them a salt whose affinity for water is great, a lime and heating in a receptacle suitable for volatile liquids, melting the residue and distilling.

Question—What is maltum? Answer—It is an exudation from the malt tree. Vinum maltum is the officinal preparation.

Of the five crude drugs submitted to him for identification he recognized buchu leaves only; did not know santonica, and pronounced senega to be licorice root, anthemis to be arnica flowers, and salvia (impressed) to be mullein. Of the five officinal galenical preparations he identified Fowler's solution; knew not syr. ferri iodid.; pronounced syr. rhei. arom. to be confection of senna; tinct. benzoës to be tincture arnica, and tinct. cinchon. comp. to be comp. tinct. cardamom.

Of the five chemicals shown him, and which were sodii carbon. cryst., potass. nitras. cryst., acid benzoic (ex gum.), ammon. chlorid. gran. and potass. ferrocyan. cryst., he recognized none.

Of course his registration was refused. A few days later I received the statement of the secretary of the — board, who testified, under seal of his board, that Mr. S— had passed his examination with a percentage of 76. I was also informed that the pharmacy law of the State of — did not permit an exchange of certificates.

The Missouri board grants a certificate if the examinee answers 60 per cent. of all the questions propounded to him correctly and exhaustively. These questions are such as may occur in the daily work of every pharmacist; practical, not unduly scientific or misleading; and so formulated that by the answers given thereto the examiners may easily form judgment whether or not they can conscientiously issue the certificate, on which they vouch with their signatures for the ability and competency of the holder. Now, how it was possible that Mr. S— passed the — board with the high percentage of 76, and at our examination fell short considerably of the required 60, I am unable to explain.

I hold that it is the task of the State Pharmacy Boards to protect the people against ignorant and incompetent compounders and vendors of medicine, and to accomplish this it is their sacred duty to make a thorough inquiry as to whether the examinee has the requisite knowledge of pharmacognosy, toxicology, doses, pharmaceutical chemistry, reading of prescriptions, weights and measures, and is familiar with the Pharmacopœia. If he possesses these requirements he deserves a certificate; otherwise, not.

I am highly in favor of a thorough college education, and consider chemistry of great importance in our profession. yet without a "good stock" of knowledge of the other branches, named above, and a practical experience of at least three years behind the counter, a competent pharmacist is an impossibility. It cannot be reasonably expected that in our comparatively young country an otherwise qualified and able pharmacist be, at the same time, an analytical chemist, who can recite to you the complex formulas of quinine, amyl-nitrite, tartaric acid, etc., nor an expert botanist, who can remember by heart the nat. ord. in which hydrastis, ipecac, illicium, etc., are classified. To the professors and tutors of chemistry and botany, this may be of importance; to the dispensing pharmacist it is valueless to remember, and questions of this kind are

superfluous, and ought therefore not to be propounded.

I cannot help smiling at the "high faluting" examination questions, published from time to time in our journals, calculated and intended to give the respective Board the dignity of highest standing and requirements; but I verily believe that by far the majority of the members of these same Boards could not answer their own questions in a satisfactory manner without the aid of books.

In my opinion, the public and our profession would be served far better if the examiners would lay more stress upon practical pharmacy and less upon theoretical.

## Granular Effervescent Preparations.\*

BY AUGUSTUS BRADLEY.

This form of medication is a most pleasing one for the exhibition of many nauseous and disagreeable medicines and those remedies where the assistance of the sedative action of carbonic acid is desired.

Not many years ago the effervescent draft was considered indispensable, but at present it has comparatively fallen into an unmerited oblivion.

It is, however, again making its appearance in such localities where it is extensively advertised.

The efficacy of these preparations, as a class, depends principally upon the amount of available carbonic acid gas contained therein. The worthless (non-effervescent) stock upon our shelves, in main, prompted me to devise a scheme whereby they could be supplied by the pharmacist fresh on a short notice.

### MODE OF PREPARING.

I propose in this paper to relate a few experiments, with results, also giving methods and formulas, with an apparatus of my own get-up, whereby the retail pharmacist can prepare his own granular effervescent preparations, and not be dependent upon the wholesale manufacturer as heretofore. These preparations are made by causing a mixture of powdered ingredients, consisting of sodium bicarbonate, tartaric or citric acids, sometimes both, and the medicament to become sufficiently moistened, as when in such pasty condition, rubbed through a coarse sieve and dried, granules are produced.

Each article should be separately powdered and dried before mixing, the citric acid to be added last and rubbed in quickly.

The drying apparatus should be previously heated for the reception of the moist granules. The proper pasty consistence of the mixture is only ascertained through practice, some mixtures requiring more of the moistening agent than others.

### SELECTION OF A MOISTENING AGENT.

The selection of a cheap moistening agent seems to me to be an item of great importance, especially when large quantities are to be made.

Samples are prepared with ether, amylic alcohol, chloroform, live steam, syrup, carbon disulphide, etc., but with each too great a loss of carbon dioxide resulted during manipulation to encourage the use of any.

Water or moisture being the prime cause of this loss, I concluded that if a

\* From a paper read before the North Carolina Pharmaceutical Association.

liquid containing no water at all be used granules could be made without any loss of gas.

I was aware that absolute alcohol contained practically no water, but also that, if it answered from this standpoint, its expensiveness would discourage its use. However, a small quantity of a mixture was tried, but owing to the hygroscopic properties of this alcohol the experiment proved a failure. In a few minutes after the granules had been removed to be dried, decomposition took place, resulting in an adherence and puffing up of the granules, showing too great a loss of gas.

Purified benzine was next tried, but owing to the disagreeable taste, odor, and too easily crushed condition of the dried product, it was abandoned.

Benzin, with different percentages of absolute alcohol resulted likewise.

After numerous experiments I found 95 per cent. (by volume) ethylic alcohol, as recommended by the National Formulary, to be the best agent for general use.

### SIEVES.

I use four copper-wire sieves Nos. 6, 20, 40 and 60, No. 6 to pass the pasty mass through the glass shelf, No. 20 to separate the dried granules from the dust (some manufacturers, to prevent any loss, do not separate it). Nos. 40 and 60 are used for thoroughly mixing the different ingredients.

I like the copper-wire sieves the best, owing to their less liability of being attacked by corrosive agents.

The temperature of the drying apparatus, with but a few exceptions, should always be constant, taking care not to allow it to go above 158 degrees F., for fear of converting the sodium bicarbonate back into the carbonate, through the loss of carbon dioxide, and also the formation of caramel in those preparations containing sugar with tartaric acid.

### LOSS IN WEIGHT.

The loss in weight encountered in drying the following articles as found in commerce, are:

Citric acid, 8 to 10 per cent.

Sodium bicarbonate, 2 to 3 per cent.

Tartaric acid, 1-500 per cent.

The use of tartaric acid alone, as recommended by the National Formulary, leaves the granules too soft. An addition of citric acid will give them firmness, and render their taste more acceptable to the majority of people.

There is no class of preparations that require such special care as these. The absence of moisture is absolutely essential, therefore the bottles should be thoroughly dried and hermetically sealed immediately after being filled. Those composed of iron, pepsin and their compounds should be stored in amber or blue glass bottles.

I will submit a few formulas, which I have compiled and am using, most of which, in course of preparation require some special precautions, which will, however, present themselves to the operator upon his first attempt.

### 1. GRANULAR EFFERVESCENT CAFFEINE CITRATE.

Caffeine citrate.....	20 grains
Sodium bicarbonate.....	600 grains
Citric acid.....	300 grains
Tartaric acid.....	240 grains
Powdered sugar.....	600 grains

### 2. GRANULAR EFFERVESCENT CAFFEINE CITRATE AND PHENACETIN.

Caffeine citrate.....	20 grains
Phenacetin.....	100 grains
Sodium bicarbonate.....	600 grains
Citric acid.....	300 grains
Tartaric acid.....	240 grains
Powdered sugar.....	600 grains



### 8. GRANULAR EFFERESCENT POTASSIUM BROMIDE.

Potassium bromide.....	¼ troy oz.
Sodium bicarbonate.....	¾ troy oz.
Tartaric acid.....	1¼ troy oz.
Citric acid.....	2 troy oz.

### 4. GRANULAR EFFERESCENT CAFFEINE CITRATE AND POTASSIUM BROMIDE.

Caffeine citrate.....	50 grains
Potassium bromide.....	¼ troy oz.
Sodium bicarbonate.....	¾ troy oz.
Tartaric acid.....	1¼ troy oz.
Citric acid.....	2 troy oz.

### 5. GRANULAR EFFERESCENT MAGNESIUM SULPHATE.

Dried magnesium sulphate.....	400 grains
Tartaric acid.....	300 grains
Citric acid.....	400 grains
Powdered sugar.....	40 grains
Sodium bicarbonate.....	600 grains

This is practically identical with the granular effervescent magnesium citrate on the market.

### 6. GRANULAR EFFERESCENT VICHY SALT.

Potassium bicarbonate.....	.45 grains
Sodium bicarbonate.....	5 troy oz.
Magnesium sulphate.....	.45 grains
Sodium carbonate.....	5 troy oz.
Tartaric acid.....	1¼ troy oz.
Citric acid.....	2 troy oz.

### 7. GRANULAR EFFERESCENT PEPSIN.

Pure powdered pepsin.....	50 grains
Citric acid.....	1¼ troy oz.
Tartaric acid.....	1¼ troy oz.
Powdered sugar.....	½ troy oz.
Sodium bicarbonate.....	¾ troy oz.

### 8. GRANULAR EFFERESCENT PEPSIN AND BISMUTH.

Pure powdered pepsin.....	50 grains
Bismuth and ammonium citrate.....	50 grains
Citric acid.....	1¼ troy oz.
Tartaric acid.....	1¼ troy oz.
Powdered sugar.....	½ troy oz.
Sodium bicarbonate.....	¾ troy oz.

I am reliably informed that these preparations are not much used in the Southern States. This is no doubt due to the want of push and advertising by those houses making specialties of them.

By calling the physicians' attention to them and furnishing a few samples, I do not hesitate to say that this most pleasing form of medication will be revived.

## The Nomenclature of the Chemicals in the Pharmacopœia of the United States.\*

THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD has brought on an interesting discussion of the English nomenclature of chemicals introduced in the new Pharmacopœia of the United States.

Professor Attfield, whose name is a household word among American as well as British pharmacists, and who had occasion to write a letter some time ago to the editor of that journal, expressed himself as follows:

"I had understood that the names or headings of the monographs of the U. S. P. would not be altered (*magnesi sulphas*, sulphate of magnesium, for example), and, indeed, the actual heading or title (*magnesi sulphas*) has not been changed. But the English rendering—I cannot call it translation—of the title has been turned around so as to harmonize with the practice of the majority of modern chemical authors. Thus, for example, it is no longer *sulphate of magnesium* but *magnesium sulphate*. From the literary point of view it is awkward, if not sollicitous, for the Latin heading to express one name and the English immediately under to express another name; nevertheless I think that the compilers were wise as well as politic in making what the majority of mankind so dearly love—a compromise. They might with the British have continued to give such names as *magnesi sulphas*, sulphate of magnesium, or with the German have given *magnesium sulphuricum*, magnesium sulphate. They have steered a middle course, preliminary, doubtless, to an abandonment of the Latin channel altogether."

Comments upon these comments were

invited by the editor of THE AMERICAN DRUGGIST, and several prominent pharmacists responded, whose opinions are given in the number published under date of Nov. 28, 1898.

An editorial paragraph introducing the communications, says that Prof. Attfield called attention to "the incongruity of the chemical nomenclature of the new U. S. Pharmacopœia in having the Latin title and the English synonym in different cases instead of [giving] a translation of the Latin, which would be "sulphate of magnesium." Professor Attfield holds that, if it be considered advisable to follow the newer methods of nomenclature, this could be done by following the example of the Germans, who say *magnesium sulphuricum*, magnesium sulphate."

We hardly think Prof. Attfield's comments have been correctly represented by the editor and by some of the correspondents. Prof. Attfield does not use the word "incongruity," and his objection is distinctly referred to the literary aspect of the case. Neither does he recommend the adoption of the German Latinic titles "if it be considered advisable to follow the newer methods," but he simply mentions the fact that the American pharmacopœial revisers might have either adopted the English plan or the German plan, but for some reason of their own "steered a middle course," which Prof. Attfield surmises to be preliminary to the abandonment of the Latin altogether. In fact, he thinks the compromise "wise" and "politic," and he nowhere says that the English name must be a translation of the Latin, although, "from a literary point of view," the English name (not "synonym") ought to be constructed on the same principle that underlies the construction of the Latin, and as nearly like it in form as practicable. He is certainly not guilty of saying that "magnesium sulphate," is a literal translation of *magnesium sulphuricum*. Again, I cannot find that Prof. Attfield is at all opposed to the adoption of the modern English chemical nomenclature.

Both titles, latinic and English, are in the nominative case, though one of the words composing the latinic title is of necessity in the genitive, while one of the words in the English title must be regarded as in fact an adjective.

Dr. Charles Rice, in his customary clear and careful style, calls attention to the fact that a correct Latin grammatical equivalent of "magnesium sulphate" is the latinic title *magnesium sulphus*, for the English title "magnesium sulphate" may well be rendered *magnesium sulphate*. He also says, correctly, that *magnesium sulphuricum*, literally translated, cannot be rendered "magnesium sulphate;" in fact it would become *sulphuric magnesium* were it literally translated.

Two of the commentators pronounce the idea of the abandonment of Latin nomenclature as "too absurd for consideration."

It is not probable that the latinic titles of the Pharmacopœia will be abandoned for many years; but those who dismiss that suggestion with the declaration that it is "too absurd for consideration" probably intended to say simply that a technical nomenclature is indispensable—not necessarily a Latin nomenclature, for the technical nomenclature might well be English. In No. 3, Vol. 2, of *The Apothecary*, the writer has shown that all the 997 titles in the Pharmacopœia of the United States (1880) are made up of 457 words, of which only 158 are of Latin origin, and that a majority of these 158 words derived from Latin are not really Latin words but coined latinic technical terms derived from Latin roots. The other 304 words which

go to make up the so-called "Latin nomenclature" of the Pharmacopœia are not more Latin than the names "snake root" and "Devil's toe nails." All the Latin attaching to most of the latinic pharmacopœial titles is their form or appearance, which is imparted to them artificially by means of latinic endings.

Distinction must be made between Latin and latinic titles, between latinic forms and technical nomenclature. The title *magnesi sulphas* is not Latin; it is simply a technical title in latinic form. The English form of the same technical title is "sulphate of magnesium." The present English technical title, "magnesium sulphate," would, in its latinic form, become *magnesium sulphas*.

Even if the so-called "Latin nomenclature" should some day be abolished and forgotten, there is no danger that we will go back to the use of such terms as "snake root" and "Devil's toe nails." The English titles employed in our Pharmacopœia are not "synonyms," as some of the writers in THE AMERICAN DRUGGIST express it, and they are gradually becoming more and more technical. The English names, "dandelion," "deadly nightshade," "henbane," "fox-glove," "squinting cucumber," "broom tops," etc., which we used to have in the Pharmacopœia, have given place to technical English titles, such as *taraxacum*, *belladonna*, *hyoscyamus*, etc. The remaining untechnical English titles will doubtless be reduced in number as rapidly as possible until there shall not be any English title left that is not technical, except for such innocent substances (medicinally considered) as water, alcohol, sugar, starch, etc. The name "corrosive sublimate" is not an English title in our Pharmacopœia, but only a synonym.

There are three principal methods of constructing latinic titles for chemicals, and only three. All of them are incidentally exemplified in the communications commenting upon Prof. Attfield's interesting note. One of these three systems is represented by the title *magnesi sulphas* used in the Pharmacopœias of Great Britain and the United States; the form *magnesium sulphuricum* belongs to a second system used in the German Pharmacopœia; the third system is represented in *sulphas magnescus*, and is employed in the French, Spanish, Scandinavian, and other Pharmacopœias. In 1880 I presented a paper to the American Pharmaceutical Association, in which I suggested that this system (of the French and Scandinavian Pharmacopœias) be adopted with the modification that the adjective precede the noun, reversing the "sulphas magnescus" and making it *magnescus sulphas*.

As each of the writers who contributed their views to THE AMERICAN DRUGGIST approve of the adoption of the new English titles for the chemicals in our Pharmacopœia—such titles as "silver nitrate" instead of nitrate of silver, "potassium iodide" instead of iodide of potassium, "ferrous sulphate" instead of sulphate of iron, "ferric sulphate" instead of tersulphate of iron, "mercurous chloride" and "mercuric chloride," etc., instead of the old style English names, it is not likely that they would favor a return to the names which have just been discarded. But if we continue to say "ferrous sulphate," why not make the latinic title *ferrosus sulphas* to correspond; if we say "ferric sulphate" why not *ferricus sulphas* also; if "mercuric iodide," why not *mercuricum iodidum*; if "mercurous chloride," why not *mercuriosum chloridum*? Some day these things will happen, and it will not be a bad thing if

\*Oscar Oldberg in *The Apothecary* for January.

our Pharmacopœia can be perfected "from the literary point of view" as well as from the standpoint of scientific correctness and utility. The "innovation" in the English chemical nomenclature of the new Pharmacopœia is a distinct step forward.

### Tobaccos.\*

By H. B. Cox.

#### HISTORY.

It has been said that the name tobacco was given to the plant by the Spaniards, because it was first observed by them at Tobasco or Tobaco, a province of Yucatan, in Mexico. Others derive the name from the "tabac," an instrument used by the natives of America in smoking this herb.

The use of tobacco for smoking and chewing purposes is supposed to have been commenced by the North American Indians at a very early period, so early, in fact, that nobody seems to have any idea as to when that period was. It is said that the Spaniards became acquainted with tobacco when they landed in Cuba in 1492, and on their return introduced it into Europe, strongly recommending it for its valuable medicinal properties, about which they probably knew nothing at all.

The custom of inhaling the smoke was learnt from the Indians, and by the end of the 16th century had become generally known throughout Spain and Portugal, whence it passed into the rest of Europe, and into Turkey, Egypt, and India, although severely opposed and forbidden both by the Christian and Mahommedan governments. Tobacco was introduced into China during the 16th century although its use was strongly prohibited.

It was not till the middle of the 16th century that tobacco was seen growing in Europe, first at Lisbon, when the French Ambassador, Jean Nicot (hence the name *Nicotiana*) sent seeds to France in 1560, as those of a valuable medicinal plant, which was, even then, diffused throughout Portugal.

When America was first discovered, and afterward when fresh tracts of the country were explored, the practice of smoking tobacco was found to be prevalent among all the tribes. Tobacco was introduced into Italy in 1560, this being about the same time as its introduction into France. Tobacco was probably first brought into this country in 1565 by Sir John Hawkins, or, at any rate, it seems unlikely that Sir Francis Drake, who is believed to have brought tobacco from Virginia in 1586, was the first to bring it into England.

Perhaps it is safe to assume that Sir Walter Raleigh and his companions were the first in this country to use the herb for smoking purposes; this was in 1584.

One thing, however, is very certain, and that is that the custom of smoking tobacco very quickly succeeded its introduction, and the growth of this habit, in spite of the most strenuous opposition, cannot fail to strike us as remarkable.

#### SOURCE.

Tobacco is the leaf of *Nicotianum Tabacum* and allied species. The genus *Nicotiana* contains about seventy-three species. Of the various species, *N. Tabacum* is by far the most extensively cultivated. It is a fine plant, growing to a height of six or seven feet. The leaves are sometimes two feet in length, and average about eighteen or twenty inches ;

they are very shortly stalked, and the base is more or less amplexical; the flower is pink, or pale red. It constitutes a very large proportion of commercial tobacco, being known and cultivated nearly all over the world.

American tobacco is almost exclusively of this species, although many varieties of it are now recognized, such as Kentucky, Big Frederic, Virginia, etc. The same plant furnishes the tobacco of Havana, France, Holland, Belgium and others. The next important species is *N. Rustica*, or Syrian tobacco. This is a much smaller plant, averaging three and a half feet in height; it has a greenish flower; it furnishes the Turkish, Syrian, and perhaps the Latakia tobaccos. It is a native of America, but is now cultivated chiefly in Asia, Africa, and Europe. It is a hardier plant than *N. Tabacum*.

The third important tobacco is *N. Persica*, which has a white flower. These three species probably constitute the whole of the tobaccos grown, although each has many varieties, especially the first *N. Tabacum*, which almost invariably forms a fresh variety when it is transplanted.

Until quite recently, "Tumbeki," the Persian tobacco of Eastern commerce, was thought to be the produce of *N. Persica*, some few experts holding the opinion that it was obtained from *N. Rustica*.

This led to much discussion, followed by much conflicting literature, so that seeds of the plant which yielded the tobacco in question were obtained from various reliable people in Persia, and sown at Kew. Meanwhile entire plants were also examined and resembled neither *N. Rustica* nor *N. Persica*, and when the plants grown from the seeds received from Persia were examined, they turned out to be those of *N. Tabacum*. This was published in the *Kew Bulletin* for 1891, p. 84.

Not feeling quite convinced on the subject, on account of the various opinions obtained from different sources, I wrote to Kew last week, and two days ago received the following reply from the Director, Mr. W. T. Thiselton Dyer, F.R.S., etc. :

"DEAR SIR: As to Shiraz tobacco, there is no ambiguity as to the conclusion arrived at in the *Kew Bulletin* for 1891, p. 84. What is ordinarily called Turkish tobacco, and as far as I know, only used for cigarettes, is the produce of *Nicotiana Rustica*."

This note on the source of Turkish tobacco is in harmony with the statement previously made by me, which I wrote a fortnight ago.

#### CONSTITUENTS.

The characteristic organic constituent of the tobacco plant is the alkaloid nicotine, with which is generally associated the essential oil or "tobacco camphor," viz., nicotianin. The proportions which all the organic substances in the plant bear to one another greatly affect the aroma and taste of the tobacco. The burning is somewhat influenced by them, but far more by the mineral or inorganic constituents present.

The freshly-cut leaves contain over 80 per cent. of water, and the proportion of nicotine varies from 1 to about 10 per cent.

Syrian is one of the lowest; that is, as regards the percentage of nicotine it contains. Two distinct samples that I examined, although widely differing from each other, gave an average of only 0.852 per cent., the actual figures being 1.093 and 0.812.

The process of determination was as follows :

Twenty-five grammes (or more or less, according to the amount of the sample at my disposal) of the dried and powdered tobacco was intimately mixed with slaked lime and distilled in a current of steam until the condensed steam was no longer alkaline; the distillate was slightly acidulated with dilute  $H_2SO_4$ , and evaporated to a conveniently small bulk. This was made alkaline with soda, and agitated repeatedly with successive portions of ether. The separated batches of ethereal solution of nicotine were then mixed and exposed to the air in a cool place. This exposure to the air carries away ammonia, if any be present, as well as ether.

Water was added to the ethereal residue, and the amount of nicotine present determined by decinormal  $H_2SO_4$ , using methyl-orange as an indicator. 1 Cc. of decinormal  $H_2SO_4$  represents 0.0162 gramme of nicotine ( $C_{10}H_{11}N$ ).

It is important that the nicotine should not be left about longer than is absolutely necessary, since it is appreciably volatile at the ordinary temperature.

Sometimes the unconcentrated ethereal solution is titrated, but in such cases ammonia, if present, would make the results high. The neutralized solution is therefore separated from the ether and evaporated to dryness over a water-bath and weighed. Some prefer to add a few Cc.'s of decinormal acid before evaporating, and these would, of course, have to be taken into account.

The residue is treated with absolute alcohol, which dissolves the sulphate of nicotine, but not the ammonium sulphate; the latter must be dried, that is, freed from alcohol and weighed, and this weight, deducted from the weight previously obtained of nicotine sulphate, will leave the absolute weight of nicotine sulphate ( $C_{10}H_{11}N_2 \cdot H_2SO_4$ ).

Table of Results, arranged according to per cent. of Nicotine.

Variety examined.	Amount of moisture present in sample, per cent.	Total ash, per cent.	"Alkaline salts," i. e., ash, sol. in HCl, per cent. of 100 pts ash.	Nicotine, per cent.
1. Syrian leaves (a).....	8.70	.....	.....	.612
2. American chewing.....	.....	80.6	58.25	.935
3. Syrian leaves (b).....	8.00	.....	.....	1.093
4. Chinese leaves.....	6.12	.....	.....	1.002
5. Turkish (coarse cut).....	.....	.....	.....	2.500
6. Golden Virginia (whole strips).....	14.00	17.82	70.70	2.501
7. Gold Flake (Virginia).....	.....	18.11	71.60	2.501
8. "Navy-cut" (light colored).....	.....	18.6	.....	2.530
9. Light returns (Kentucky).....	.....	16.1	61.11	2.733
10. "Navy-cut" (dark "all tobacco").....	.....	16.6	.....	3.640
11. Best "Birds-eye".....	.....	16.0	64.33	3.931
12. Cut Cavendish (a).....	.....	18.62	70.90	4.212
13. "Best Shag" (a).....	.....	15.46	80.25	4.907
14. "Cut Cavendish" (b).....	.....	.....	.....	4.970
15. "Best Shag" (b).....	.....	.....	.....	5.000
16. French tobacco.....	.....	17.20	.....	8.711
17. Algerian (a).....	.....	17.20	.....	8.813
18. Algerian (b).....	.....	17.40	.....	8.900

The above list includes no proprietary tobaccos, and it must not be inferred that the samples examined were standard samples. They were obtained from very different sources, no two samples of one kind being obtained from the same source. The ash was not determined in Nos. 1, 8, 4, and 5, for want of material, while the

\*Read at a meeting of the School of Pharmacy Students' Association, January 11, 1894.

examination of Nos. 15, 16, 17, 18, was incomplete for lack of time.

The average percentage of nicotine in Syrian tobacco is from 1 to 2; in Manilla and Havana 1 to 3; Virginian and Kentucky up to 7; French up to 9. The French and Algerian samples which I examined resembled each other very closely in every way, which may probably be explained by the fact that much of the Algerian tobacco is imported into France and manufactured at the government factories.

It is supposed that the aroma given off during the smoking of tobacco is due rather to the nicotianin or tobacco camphor than to the nicotine, although the former is present only to a very small amount. The odor given off from an aqueous solution of nicotine, however, was variously described to me as like that of senna tea, or a saucepan that cabbage has been boiled in.

The conditions of soil and climate which favor the production of nicotine retard that of nicotianin and *vice versa*. The quantity of nicotine present is no criterion of the quality of the tobacco, inasmuch as many of the most delicately-flavored and choice tobaccos contain little of it. The cellulose, gum, etc., in the leaf give off objectionable odors in burning, and fermentation gets rid of or modifies these when present in considerable quantity. The fermentation must not, however, be excessive, or objectionable and injurious ammoniacal salts would be formed. Many tropically-grown varieties contain little of these unpleasant constituents, so that in some cases fermentation is dispensed with, and in many others is greatly lessened, sun-drying alone often proving sufficient for the preparation of the leaves. The chief organic acids in tobacco are malic, citric, and oxalic, while acetic acid has been found in fermented tobaccos.

The ash of tobacco varies greatly in composition and quality, although the percentage is from 12 to 20; it invariably contains potassium, sodium, calcium, magnesium, aluminium, usually a trace of iron oxide, and carbonic, phosphoric, silicic, and sulphuric acids, and chlorine.

Potash is sometimes present to the extent of 80 per cent. of the total ash, and should be mainly combined with the organic acids. The ready decomposition of the organic potassium salts by heat constitutes a good burning tobacco. The potassium salts are converted into carbonate in burning, and consequently the combined presence of potassium and carbonic anhydride in the ash may be taken as a good indication. From the excess of these two, of course, it follows that the other constituents must be present in smaller proportions, the lime generally lower than the potash, with smaller quantities of magnesia, soda, and alumina. Iron is objectionable, giving a red ash. Lithium is present in the ash of most tobaccos. Silicic and phosphoric acids, even in considerable quantity, do not seem to affect the combustion to any great extent, but chlorine, except in very minute quantity, retards it.

The leaves contain more calcium, magnesium, and silicic acid, and less alkali, phosphoric acid, and chlorine than the stalks. The stalks contain much potassium nitrate, and their presence in "bird's eye" tobacco renders this tobacco very readily combustible without any addition.

According to Nessler, tobacco burns best when it contains a large proportion of potassium malate, but the effect may be imitated by the addition of acetate or other organic potassium salt: The combustibility may be diminished by the addition of magnesium or calcium sulphate.

Sulphates seem to favor proper combination. Mayer observes that tobacco which burns badly can be made to burn well by steeping it for twenty-four hours in a 0.5 per cent. solution of potassium acetate or nitrate. A solution of calcium acetate of the same strength gives excellent results, as I have proved.

Tobacco seeds yield by pressure 30 per cent. of a greenish-yellow, mild, odorless oil, having a sp. gr. of .923 at 15° C. This oil quickly dries by exposure to the air.

#### IMPORTATION.

The forms in which tobacco is imported into this country are many, each variety being purchased according to its suitability for the preparation of some fancy tobacco, and although commercial tobacco is divided into five classes, every manufacturer has his own method of selection.

The chief imported varieties are Virginian, Kentucky, Maryland, Indiana, Java, China, Japan, Ceylon, Turkish and German. The largest quantities come (1) from the U. S. A.; (2) Germany; and much less from Japan, India, China, and Eastern countries.

Imported tobaccos generally contain about 14 per cent. of water, although apparently dry and brittle.

#### MANUFACTURE.

The bulk of imported leaves are used for the manufacture of the fancy tobaccos, the material being chosen according to the variety of salable tobacco required.

Shag is usually made from the darker and stronger varieties.

In "bird's eye" the prepared leaves are placed in such a manner upon one another that they will be cut right across the midrib.

For "twist" or "cake" tobacco the leaves are stripped, moistened, and placed end to end, and then spun into a rope round a reel, or wound into a ball, either by hand, or by a spinning-wheel. The whole is then steeped in liquor, and finally oiled with sweet oil. The oiling process greatly affects the ready burning of this tobacco.

In America it is usual to saturate the leaves and stalks previous to pressing into cakes with molasses, or a mixture of this substance and licorice. I have extracted a considerable quantity of glycyrrhizin from this cake tobacco, and have also found ligulate florets in it.

Leaves which are to be made into cigars must possess the following qualities: They must be of a good color, possess a fair amount of body, and an agreeable odor, and must give off an agreeable aroma when burning, and last, but by no means least, they must burn well. It should also be mentioned here that a fine texture and small veins are favorable characteristics. A machine is now in use by which mid-ribs and stalks are flattened by pressure so that they may appear like parts of the lamina.

The "burning test" is to ascertain whether the leaves will continue to burn after being once lighted, although this can be no guide as to the quality of the cigar. Sometimes cigars are made of tobacco which will only burn very slowly and difficultly, in which case it is the rule to mix "fiery" tobacco with them, but this method produces only inferior cigars, and unless they are made with extreme care they do not burn evenly.

The best cigars are made of one kind of leaf only, but in common kinds the interior is a mixture, made up of stalks, etc., concealed in an attractive wrapper. In many foreign cigars the wrapper has been

found to contain much potassium nitrate, while the interior, consisting of the same kind of tobacco, contains none. This is added so as to make the wrapper burn down evenly with the interior. Glycerin is said to be sometimes added to keep the cigars from becoming too dry.

Cigars are rarely adulterated, and though not always what their outside would represent them to be, they contain nothing but tobacco. Cases have been reported of cigars containing hay, cabbage, and brown paper, but such cases are extremely rare.

The chief imposition seems to be the practice of placing home-made cigars in imitation foreign boxes. Another custom is to send German and other continental to the West Indies, whence they return as a special brand of West Indian cigars.

Cigars chiefly come from the West Indies (and these, of course, include the German ones), the Philippine Islands, and, recently, from Mexico and Jamaica.

Cigarettes are usually made of light tobacco, such as Turkish Salonica, etc., which has but little odor, and this a pleasant one. American tobacco is largely used for this purpose.

Snuff is made from finely powdered tobacco stalks. The moisture should not exceed 25 per cent, but is sometimes present to the extent of 50 per cent. It is variously scented. In the United Kingdom nothing is allowed to be added to snuff except the carbonates, chlorides, and sulphates of potassium and sodium, and the carbonate of ammonium.

#### ENGLISH-GROWN TOBACCO.

From the very first the cultivation of tobacco in England was a success, but this was prohibited by James I. and Charles I., though with little effect. The home-grown tobacco was heavily taxed, and it was expected that this would cause the cultivation to be dropped for want of profit. This heavy taxing was due in a great measure to the difficulty experienced in collecting the duty, which was extensively evaded. In 1652 the cultivation in England was prohibited, and shortly afterward an order was issued to destroy the plantations. The illegal growth, however, continued, and the cultivation was not finally stopped until the reign of George III., when, in 1782, an act to this effect was passed, and the tobacco trade was forced out of the country.

Extensive plantations in Yorkshire were by this act destroyed, and the planters heavily fined and imprisoned.

The growth of tobacco in Ireland was not so hampered by opposition, and so it managed to struggle on till 1831 when it was suddenly suppressed.

In 1836, owing to the agricultural depression in this country, the question of cultivating tobacco in England was once more raised. Permission was sought and obtained, with severe restrictions, to make experiments on the subject.

The results were, to say the least of it, promising, although nobody expected we should be able to grow Havana cigars in Kent, even though they do make them in Germany.

In 1897 permission was again obtained, but as soon as the new industry sprang up in this country it encountered tremendous opposition and was finally stopped.

Some samples of English-grown tobacco were analyzed and found to contain, on the average, light leaves 3.6 per cent., and the dark leaves 2.4 per cent. of nicotine. It will be noticed that the proportion of alkaloid in the light leaves was higher than in the dark, the reverse of what is usually the case.

## The Standard Temperature for Specific Gravity.\*

By D. B. DOTT, F.I.C., F.R.S.E.

For the accurate determination of the specific gravity of a liquid the most suitable temperature is 0° C., chiefly because it is easy to obtain and maintain that temperature correctly by immersing the vessel containing the liquid in melting ice. For practical purposes, however, what is wanted is not extreme accuracy, but sufficient accuracy, with the maximum of convenience. Hence the specific gravity of a liquid is usually referred to the ordinary temperature, which has come to be generally regarded as 60° F. There is, however, no absolutely fixed rule in this respect. The legal standard for determining the measures of capacity is 62° F., and in looking over such a book as Watts' "Dictionary" one sees all manner of temperatures, from 10° to 20°, in the references to the authorities quoted. There may be a sense in which 60° F. is the normal temperature. If we were in the habit of working out of doors it might perhaps be so regarded, but the average temperature of a laboratory must be decidedly over 60° F. Besides, the question of what constitutes the average temperature of a laboratory is not the chief consideration in the matter under discussion. In the very usual methods of determining specific gravity by means of a bottle with perforated stopper, or by the ordinary form of Sprengel tube, it is of no consequence that the temperature should fall in the course of weighing, but it is decidedly objectionable that the temperature should rise. Not only so, but while it is always easy to slightly warm a liquid, it is difficult and troublesome in summer weather to cool the liquid to 60°. What I wish to submit is that in the future determinations of specific gravity the more convenient course would be to refer the determination to 20° C. instead of to 15°.5 as is customary at present.

## Medical Notes.

**Iodoform and Asafoetida for Influenza.**—D. Leslie E. Keeley, of gold cure fame, states that he has had the most favorable results in practice in influenza from the administration of pills one-eighth grain of iodoform and four grains of asafoetida. He states that four of these pills should be given every six hours during the day and night.

**Digitalis for Chilblains.**—To prevent suppurative fissures or ulcers, Dr. Pilatti (*Sem. Med.*) recommends the local use of the following formula, which has given him very satisfactory results when employed in conjunction with general treatment:

Tincture digitalis..... 2 parts  
Thymol..... 1 part  
70 per cent. alcohol, } ..... of each 50 parts  
Glycerine.

Externally.

Against the itching, painting with iodine tincture, once every three or four days, is considered very efficacious. Fatty substances, even vaseline, should be avoided, and warm gloves and stockings are held to be more harmful than useful.

**The Treatment of Erysipelas with Chlorphenols and Bromphenols.**—Tchourliow (*La Semaine Médicale*, 1894, No. 2) has employed topical applications of 1, 2,

and 3 per cent. ointments of orthochlorophenol, parachlorophenol, and orthobromophenol in the treatment of erysipelas, with satisfactory results. The ointment is carefully rubbed into the involved area for about a minute twice a day. The friction is followed by tingling, sometimes by a sense of painful pricking, which disappears in the course of two or three minutes. Of 25 cases thus treated a cure ensued on the second day in 6; on the third day in 8; on the fourth day in 8; on the sixth day in 2; on the seventh day in 4; and on the eighth day in 2. It is further believed that good results could be obtained by subcutaneous injection of the same agents in aqueous solution.—*Med. News*.

**To Make Bed-pans Comfortable.**—Make a pad of cotton cloth with any soft filling, eight inches square and one thick; to one side sew a piece of cotton cloth long enough to do the following: The pad should be placed on the posterior part of the pan on which the sacrum rests; then pass the cotton cloth band from the posterior edge of pan under the latter and forward to the prolongation in front, and fasten by passing the cloth over the latter, through a hole in its substance. This will hold the pad in place, while the latter contributes greatly to the patient's comfort.

**Treatment of Dyspepsia in Children.**—Tordens, in a discussion of the therapeutics of infantile dyspepsia and the subsequent atonic condition of the bowels, makes four divisions of treatment: 1. Elimination of noxious elements by emesis, lavage (both rarely if ever called for), and catharsis. 2. Anti-fermentative medicines. Among these he includes the various combinations of pepsin, resorcin, caliclyic acid. In cases of diarrhoea with markedly green stools, he recommends lactic acid in small doses.

The following combination he also finds useful:

Creosoti..... 2-4 drops  
Aque destil..... 35.00 Gm.  
Syr. altheæ..... 15.00 Gm.

M. Sig.—A small teaspoonful every two hours.

3. Sedatives, warm baths, and light friction. For colicky pains a mixture of aquach amomilla, subnitrate of bismuth, and syrup of anise often gives relief. 4. Tonics and stimulants for the subsequent atony of great value are:

Tinct. cascariæ..... 10 drops  
Aque destil..... 50.00 Gm.  
Syrup..... 10.00 Gm.  
Ext. cort. chinæ..... 0.25 Gm.  
Aque destil..... 50.00 Gm.  
Syr. aurante..... 10.00 Gm.

M. Sig.—To be given in teaspoonful doses.—*Boston Medical and Surgical Journal*.

**Permanganate as an Antidote to KCy.**—J. Kossa, considering that potassium permanganate ought, theoretically, to act as a chemical antidote to potassium cyanide, by checking the paralysis of the respiratory centers, has performed some experiments, the results of which appear to fully justify his hypothesis. Rabbits were shown to be fatally affected in a few minutes by 0.01 Gm. of the poison, but if the time of administration 0.5 Gm. of permanganate dissolved in 50 Cc. of water was also introduced into the stomach doses of cyanide up to 0.1 Gm. failed to cause death. Larger quantities (0.2 Gm.) proved fatal under similar conditions, but the action of the poison was much delayed. Successful experiments were also performed with aqueous solu-

tions of hydrocyanic acid containing 0.1 per cent. It is suggested, therefore, that in cases of cyanide poisoning  $\frac{1}{4}$  to  $\frac{1}{2}$  liter of a 3 to 5 per cent. solution of permanganate be administered immediately (*Vratch*, through *Nouv. rem.*, ix., 567).

**The Antipyretic Action of External Applications of Cocaine.**—At a recent meeting of the *Société des sciences médicales de Lyon*, the proceedings of which are reported in the *Lyon médical* for January 14, M. Gélley, a hospital interne, made a communication on the antipyretic action of cocaine applied to the skin. In Professor Teisser's service a nurse had been directed to make applications of guaiacol to a number of feverish patients. Having one day used by mistake a solution of cocaine, he reported that he had taken the wrong bottle, but the patient's temperature curves nevertheless showed a reduction. Systematic trials were then begun and M. Teisser was able to observe that a reduction of several degrees was produced if care was taken to make the applications at a time when the temperature was no longer rising. The effect upon the general condition was apparently the same as when guaiacol was painted on. The patient experienced a sensation of repose and well-being, but the course of the disease was not modified. The procedure is the same as with guaiacol. A solution of from three-quarters of a grain to a grain and a half of cocaine in a quarter of a teaspoonful of water should be used for each application, and the solution is to be applied to the upper part of the thigh. The antipyretic action of the application of cocaine is analogous to that of the application of guaiacol, but it is the little less energetic. M. Guinard reported that he had repeated these experiments on rabbits. He had resorted to the use of a cocaineized ointment, the use of which was easier, but he had satisfied himself that unmedicated ointment was incapable of producing any reduction of temperature. With the cocaineized ointment on the other hand, he had caused a reduction of nearly 2° F. He thought it demonstrated that the medicaments employed acted upon the peripheral nerves.

**Ferratin—a New Preparation of Iron.**—Professor O. Schmiedeberg, who has for some time been working at the subject, announces that he has succeeded in isolating the organic iron compound which is the only form in which iron is ingested with food and stored up in the tissues as a reserve material for the formation of blood. This natural ferratin, as he proposes to call it, is difficult and expensive to prepare, but after many failures an artificial substance of identical composition can now be manufactured. It is claimed that this preparation of iron, even when its administration is long continued, never gives rise to disturbance of the functions of stomach and intestine; that, indeed, improvement of the appetite and evacuations follow from its whole-some local influence upon the alimentary mucous membrane; and that it is *par excellence* the assimilable iron compound. Representing as it does the natural iron of the food, ferratin may be regarded primarily as a food, and may be administered to patients who, otherwise healthy, show signs of inadequate blood formation. It is likely also to be of much service in cases of chlorosis, where the long-continued administration of iron is necessary. Ferratin contains 6 per cent. of iron. It is a fine, reddish-brown powder, insoluble in water. A sodium compound is also prepared, and this is readily soluble. For children the daily dose is from 1 to 8 grains; for adults, 10 to 20 grains.

\*Read before the Edinburgh branch of the British Pharmaceutical Society.



**Bismuth in Gastric Catarrh.**—Pick is of opinion that bismuth frequently fails in this condition because the doses administered are insufficient and because as usually taken a proportion of the drug is retained in the pharynx, œsophagus, etc., and does not reach the stomach for some time. The insoluble nature of the subnitrate makes the chance of poisoning extremely remote, and the author therefore employs this salt in doses of 3 to 4 drachms. The dose is divided into two parts and swallowed in water paper. It is given half an hour after a teaspoonful or less of Carlsbad salt dissolved in half a pint of warm water has been taken. The saline draft should be prescribed before breakfast, and after the bismuth the gastric region may be treated to massage in order to secure the diffusion of the drug over the whole surface of the mucous membrane.

**The Antiseptic Action of Diaphthol.**—In the *Revue générale de clinique et de thérapeutique* for January 17 there is a letter in which the writer remarks that M. Guinard has been making a critical and experimental study of diaphthol, which is the orthoquinolinemetasulphonic acid of chemists. It is a powder, fusible at 295° C. and capable of being crystallized in the form of brilliant needles which are colored green by perchloride of iron, and not by contact with metallic iron. By its decomposition it sets oxyquinoline free. With an alkaline solution it forms soluble diaphtholates. The diaphtholate of sodium in a ten per cent. solution kills the *Bacillus pyogenes foetidus* and the *Staphylococcus pyogenes* in thirty or fifty minutes. In a five per cent. solution it only weakens their virulence.

Diaphthol is not very poisonous. The urine of animals which have ingested it rarely undergoes ammoniacal fermentation; nevertheless, it becomes putrid. In experiments recently made, it has been ascertained that the liver of these animals is preserved a long time without decomposition; therefore it is a substance which is opposed to certain fermentations. Add to these essential qualities the fact that this remedy is well borne by the gastric and intestinal mucous membranes, and it is easy to understand the interest shown in the use of diaphthol as an internal antiseptic, and especially as an antiseptic of the urinary passages, as it is eliminated free by the urine.

**Dyspepsia and Constipation.**—Germain Sée considers that most of the conditions treated as dyspepsia, dilatation of the stomach, etc., are really sluggish conditions of the enteric mucous membrane due to constipation. He insists on the mechanical rôle of this constipation in causing hemorrhoids, hernias, vesico-uterine tumors, hypertrophy of prostate, etc. He recommends that the constipation be overcome without purgatives, but that simple laxatives like senna, hydragris canadensis, castor oil or large doses of olive oil be used. To relieve the pain attending these conditions of the mucous membrane of the intestine, he recommends:

Calcium brom. . . . . 30 Gm.  
Calcium chlorid . . . . . 500 Gm.  
Aque . . . . . 500 Gm.

Sig.—Dessertspoonful in twice its quantity of water at meal times.

For particularly acute crises of pain he uses:

Menthol . . . . . 10 Gm.  
Spts. vin rect. . . . . 5 Gm.  
Aque des . . . . . 180 Gm.

Sig.—Teaspoonful as indicated.

To combat fermentation and tympanism, he recommends phosphate of soda two scruples to three scruples, salicylic acid Gm. iij to vi, and borax. To combat auto-intoxication he regulates the diet.

## The Clinical Effects of Hyoscine Hydrobromide.

The January number of the *Practitioner* contains the report of the clinical experiments of Gordon Sharp, M.B., with this drug. Although hyoscine, he says, is an isomer of atropine and hyoscyamine, it is generally believed to differ widely from them in its physiological effects. It was from the reports previously published of its beneficial action as a motor calmative, cerebral sedative, and hypnotic in delirium that the author was led to make a thorough test of the drug.

It was used hypodermically in cases of delirium tremens and in others for sleeplessness. In one of the delirium cases the effect was to reduce the large movements to a constant jerking of the extremities. There was paralysis of the muscles of deglutition, and the pulse and the movements of respiration were increased to such an extent that sleep was impossible. The pupils were widely dilated, with the eyes wide open.

For a time the patient was in a comatose condition, but finally came out from under the influence of the medicine. A mixture of chloral and potassium bromide was given to produce sleep and quiet nervousness.

In another case of delirium the author was satisfied that death was hastened by the great stimulation of the circulation and of the respiratory center. In a case of anemia, where everything had been tried to correct the headache and sleeplessness, a dose of hyoscine was given. It produced delirium so great as to alarm the attendants. There was convulsive jerking of the limbs, with extreme dryness of the throat, but without the slightest hypnotic effect.

The author has decided that hyoscine differs but little in its action from atropine, and thinks that, until more is known of its chemistry, pharmacology, and clinical effect, it can hardly be recommended as a safe hypnotic.—*N. Y. Med. Jour.*

## The Prevention of Tuberculosis

The question of the best methods of treating tuberculosis and preventing its spread came up for consideration at a meeting of the New York State Board of Health, held in this city on February 9.

Dr. Cyrus Edson, president of the Sanitary Board of the City of New York, made the most important contribution to the discussion, submitting a report that was listened to with the deepest attention.

"The matter of the contagiousness of tuberculosis, referred to me," said Dr. Edson, "has been very carefully considered. The subject is well summed up in the following three propositions, which are to be considered as proven facts:

"First—Tuberculosis is a contagious disease, and is distinctly preventable.

"Second—It is acquired by direct transmission of the tubercle bacilli from the sick to the well, usually by means of the dried and pulverized sputum floating as dust in the air.

"Third—It can be to a great extent prevented by simple and easily applied measures of cleanliness and disinfection.

### PREVENTIVE MEASURES.

"I have the honor to offer the following recommendations, based upon the foregoing premises, to the Board for its consideration:

"First—That circulars be sent throughout the State, setting forth the danger of the disease and the fact that the discharges from the lungs of tuberculosis patients are not only dangerous to others, but also to the person afflicted, and also setting forth the danger of expectorating in places where the sputum is liable to be dried and carried by the air in the form of dust.

"Cases should be reported to local health officers within seven days of the time when the sick person comes under observation. Then the officers should take the necessary action.

"Second—After the death of a patient the room occupied by him should be thoroughly disinfected. The entire premises should be carefully treated.

"Third—Suitable receptacles or cuspidors should be provided to receive the sputa. These should be put in all public places, such as railroad cars, factories, stations, etc."

Dr. Edson then suggested that a circular embodying the following points should be approved by the State Board of Health, and distributed among local health officers, physicians and others vitally interested in the matter:

### NECESSITY OF DISINFECTION.

"First—Local health officers will register the name, address, sex and age of each patient suffering from tuberculosis.

"Second—When notice of the existence of the disease shall be obtained inspectors will visit the premises and family, and leave circulars furnishing the necessary advice for preventing the spread of the disease.

"Third—Premises which have been occupied by consumptives, when vacated by their death or removal, must be freed from all such articles as carpets, rugs, bedding, etc. Then these articles must be thoroughly disinfected.

"Fourth—The authorities of all public institutions under the jurisdiction of the State Board of Health, such as hospitals, dispensaries, asylums, prisons, homes, etc., shall be required to furnish to the Board of Health of the State of New York the names and last addresses of every consumptive coming under observations with seven days.

"It is the earnest wish and hope of the State Board of Health that an earnest and determined effort be made to restrict the ravages of the most prevalent and formidable disease with which modern civilization has to deal."

As containing a concise statement of facts which should be known by consumptives and those living with them, Dr. Edson submitted the following:

### FACTS WHICH SHOULD BE KNOWN BY CONSUMPTIVES.

"Consumption is a disease which can be taken from others. It is not simply caused by colds. It is usually caused by germs which enter the body with the air breathed.

"What consumptives cough or spit up contains millions of these germs, any one of which may cause a person to get the disease. The matter dries and floats in the air in the form of dust. Then a well person may receive the disease from one afflicted by consumption. It can be cured, and generally is not fatal.

"Healthy persons may live safely with consumptives if the matter mentioned is destroyed. This matter should be placed in cups containing water, then the cups should be carefully emptied and washed twice each day. Consumptives should sleep alone."

### "Doc," the Corner Druggist.\*

Whether it is because of the financial stringency through which we are passing, or whether other influences are being felt, there appears just now to be a decided increase in the amount of medical knowledge demanded and furnished in the drug store. This does not apply alone to the smaller stores in crowded districts, nor to the druggist in the country, where often "Doc" has a well earned diploma to back up his possession of the title, and his right to prescribe as well as to dispense.

Considering the pleasant business and social relationship habitually maintained between doctor and druggist in this city, it is the more to be regretted that duty requires us to make a vigorous protest against what appears to be a growing tendency on the part of some apothecaries, even in the best portions of this city, to usurp the prerogatives of the properly qualified medical adviser. The physician can have no better friend and ally than the honest dispenser of his prescribed remedies, and by reason of the security and satisfaction he has in the belief that pure drugs, accurately weighed and skill-

\* Editorial in the *Medical Record*.



fully combined, will be delivered on his written order, he feels that he is indebted to the extent of a certain amount of moral and financial support.

The appreciation, on the physician's part, of this conscientious co-operation may be shown in many ways, and the prosperity of this or that pharmacy can often be clearly traced to practitioners who have given it their support and commendation. When dishonesty enters the druggist's door, enmity must replace the doctor's friendliness.

Acting the part of the physician is one form of dishonesty, and a bad one. The druggist without a medical diploma has no more right to heal the sick than any other irregular or quack. Perhaps it is because we have done so much to rid the city of the latter undesirable class that the druggist finds his field of would-be usefulness increasing.

The habit of calling upon "Doc" for advice in "slight ailments" gradually leads to weighty transcounter consultations and examinations in the back room, to say nothing of the minor surgery practiced, and indeed urinary analysis made in some accommodating shops. When the financial loss to the physician from all this is taken into consideration, together with the injustice done him in having his successful prescriptions passed along for the benefit of "similarly affected," and the injurious results arising from the unauthorized refilling of prescriptions, one must needs wonder that no decided stand in self-defense has been taken. To be sure, the increasing use of tablets has dealt the druggist, as well as the homeopathist, a staggering blow, and in some instances the doctor's office has been stocked with remedies in convenient form from motives of self-protection. Whatever falling off there may have been in the prescription department from this growing custom, which is much a matter of individual taste and expediency, it in no wise excuses the apothecary for turning doctor unless he does it in the good old way, in which event we will welcome him with encircling arms. Just as in the dispensary question, it is against the abuse, and not against the institution, that weapons must be taken up. The pharmacy is a necessity, the honest pharmacist a blessing. Let us hope that moral suasion will be the only weapon needed to bring "Doc, the prescriber," back where he belongs, in the ranks of a most honorable army.

### Somatose:

#### An Albumose Food-Product.

It is generally believed that broths and soups prepared from meat extracts, while possessed of slight stimulating effects, are devoid of nutritive value, and therefore incapable of acting as tissue-builders. Recent investigations have shown that the peptones, which form so large a proportion of the meat preparations in the market, also possess little or no value as nutrients.

It has, therefore, been the aim of chemists and physiologists, in late years, to eliminate peptones as much as possible from meat preparations, and to materially increase the amount of albumoses, whose value as nutrients has been generally recognized.

The Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, have finally succeeded in their efforts to produce a preparation of constantly uniform composition, consisting almost entirely of albumoses. This preparation has been introduced under the name of somatose.

### DESCRIPTION.

Somatose is a light yellow, somewhat granular powder, readily and completely soluble in water and aqueous fluids, odorless and practically tasteless. It is prepared from meat and contains the albuminous elements of the latter in a soluble and highly concentrated form, 80 grains of somatose being equivalent to about 1½ ounces of fresh beef (1 to 8). The salts present in somatose correspond to the nutritive salts of fresh meats, among which occurs the phosphate of potassium so important in the formation of muscular and cellular tissue. Somatose consists essentially of albumoses which have the advantages over peptones of being completely utilized within the organism; of being tasteless and odorless, and well borne by even the most sensitive stomach on account of their freedom from irritating properties.

### PHYSIOLOGICAL ACTION.

The nutrient properties of somatose are available both by administration *per orem* and by hypodermatic injection into the cellular tissue. With reference to the nutritive value of albumoses, which constitute about 90 per cent. of somatose, Professor Chittenden (*Dietetic Gazette*, January, 1894) writes as follows:

"Albumoses are readily absorbed, and hence, when taken as food, easily supply the needs of the body for albuminous matter. In view of these facts it is plain that the higher the percentage of albumoses in an artificial food product the higher will be its nutritive value. So far as can be judged from a chemical examination, this preparation (somatose) must be possessed of high nutritive power, as it is composed chiefly of albumoses or proteoses, free from undesirable by-products and consequently unlikely to give rise to systemic disturbances. It thus differs from ordinary preparations of animal foods in its high content of albumoses, which fact bids fair to make it a valuable product for supplying a lack of albumin within the system."

Dr. Goldman (*Pharmaceutische Zeitung*, Oct. 28, 1893) regards the albumoses as readily assimilable substances, which are completely converted into the albumin of the tissues; and Politzer, Gerlach, Ewald, Pfeiffer, v. Noorden, Hildebrandt and others conclude that they are capable of entirely replacing the proteids in the food, and maintaining the body not only in an equilibrium of nutrition, but even producing a gain in flesh.

Dr. Kuhn, who has made a series of careful experiments with somatose on healthy and diseased persons at the medical clinic of Professor Riegel, at Giessen, reports that the preparation was well borne without producing diarrhoea, and that it decidedly promotes reconstructive metamorphosis. Dr. Hildebrandt (*Zeitschrift für Physiologische Chemie*, July 21, 1893) has experimented on animals (dogs) with subcutaneous injections of somatose, and recommends for trial this method of introducing albumoses into the system, in cases where feeding *per orem* is contraindicated. He found that when injected into the cellular tissue the albumoses are utilized as nutrients in the system, no trace of them appearing in the urine; and Goldmann (*Pharmaceutische Centralhalle*, Oct. 26, 1893), who repeated these experiments, reached identically the same results.

### THERAPEUTICS.

The properties which render somatose especially suitable as a food for the sick may be briefly recapitulated as follows: 1. It is readily absorbed even in diseased conditions of the gastro-intestinal tract,

2. It is taken up in sufficient quantities to insure the patient against the evils of malnutrition, and has the remarkable property of stimulating the appetite (which is diminished under the influence of the artificial peptones). 3. It does not disturb the most delicate stomach, never causing flatulence or diarrhoea. 4. Being tasteless and odorless, it is easy and agreeable of administration, and, if desired, may be given without knowledge of the patient, and without exciting the repugnance produced by the use of peptones.

These manifest advantages of somatose give it a wide range of therapeutic utility. A number of cases have been recently reported by Dr. Kuhn from Prof. Riegel's clinic at Giessen, which illustrate the benefits derived from this preparation in conditions of extreme malnutrition. Prof. Leichtenstern, of Cologne, writes under date of Dec. 4, 1893: "The preparation was well borne by all the patients, and I am sure that somatose, whose nutritive value is incontestable, will maintain its position among similar products."

Special indications for the use of somatose are: febrile diseases (such as typhoid fever), gastric affections, phthisis, rickets, anæmia, and chlorosis, and convalescence from debilitating diseases.

### DOSE AND MANNER OF ADMINISTRATION.

The dose varies according to the age and constitution of the patient, and ranges from 10.0 Gm. to 20.0 Gm. (150 to 300 grains) and even 30.0 Gm. (450 grains) within the twenty-four hours; hence one to two level teaspoonfuls, or two to four dessertspoonfuls, according to age, may be administered daily.

A useful form of administration is the solution of somatose in milk, cocoa, bouillon or gruels. It is preferable to administer these solutions shortly before meals.

### Cholera.

It may be interesting to our readers to read some extracts from a letter from Constantinople written last December. The letter is not from a physician, but from a person having such opportunities for accurate observation as to entitle his account to the readiest acceptance:

"Cholera is said to be increasing. I pity the poor, especially the natives, for they have no protection from the municipal doctors, who seize them on the slightest pretense. One man was reported to be ailing a little. The municipal doctor came, said it was cholera, covered him all over with chloride of lime, wrapped him in a cloth, then smeared that with tar, then injected a solution of phenic acid behind his ears and into his nose. The priest was called, was sprayed with a solution of phenic acid till his robe was soaked with it, and his beard and hair; then he was told to say the prayers for the dying. Then the man was carried off to the cholera hospital; and the next day word came that he was dead and buried."

"A few days ago, a *hamal* (porter) who had too heavy a load stopped to rest on the bridge—put off his load, put his hands to his sides and gave a groan. Naturally, he looked a little pale. In a moment a crowd gathered; then the police came and carried him to the cholera hospital, in spite of his protestations that it was his heavy load, that he was not sick. In due time his friends heard that he was dead and buried."

"The poor people are frightened, and try to conceal themselves if they are really sick. Doctors generally are having an easy time, for no one likes to have a doctor seen entering his house."—*Boston Med. and Surg. Journal*.

### The New Antidote for Morphine.

Potassium permanganate is now brought forward as an antidote for morphine, far more efficacious than those usually employed. A New York physician recently made a striking demonstration of this by swallowing three grains of morphine, following the dose by four grains of potassium permanganate dissolved in four ounces of water. The experiment was tried in the presence of a number of physicians, some of whom were alarmed at what would ordinarily be supposed to result, but no bad effects followed.

It would be quite interesting to know to what extent, if any, this antidote would be efficacious when the morphine has been given hypodermically, all the experiments having been made on dogs, all of whom recovered, through the supposed agency of the permanganate.

But more recently experiments with this new antidote have been tried in Chicago, the subject selected being of the canine species, a small yellow dog weighing fourteen pounds, about one-tenth the average weight of a man. Eight grains of morphine were injected into the neck of the dog which by comparative weight would be equivalent to about eighty grains for a man. After the injection the dog lost its sprightliness, crept out of sight and began to moan. The physicians were in waiting for narcosis to set in before administering the antidote. After waiting for forty minutes, the patience of the physicians gave out and six grains more were administered, making a grain of morphine to each pound of dog. After waiting a long time for narcosis to set in the dog recovered without the use of permanganate, convincing the doctors that this dog was either a confirmed morphine eater or else all dogs were poor subjects for this kind of experiments. The object was to ascertain whether or not this antidote will work when the morphine has been administered hypodermically. As all the experiments heretofore made to ascertain this have been made on dogs, this experiment seems to demonstrate pretty conclusively that dogs are very little susceptible to the effects of morphine and will recover without the use of any antidote. However, if the permanganate acts by decomposing the morphine by its strong oxidizing action, as is the most plausible theory, it hardly seems probable that it could do this when the poison had entered the circulation as well as by more direct contact in the stomach. More experiments of this kind are proposed, and developments will be awaited with interest.

### A Study of Dreams.

It is a curious fact that the phenomena of dreaming, which form so interesting and conspicuous a portion of every human life, have been but little investigated in the strictly scientific and experimental method. There are plenty of dream books and folk-lore; medical writers all allude to dreams as factors in disturbed sleep; and some curious attempts have been made to associate the character of the dreams with the pathological condition. But, after all, even the traditional association of nightmare and a heavy meal does not stand on very sound scientific footing. Miss Mary Whiton Calkins, in the *American Journal of Psychology*, has contributed something toward the filling of the lacuna in our knowledge of dreamland.

The subjects experimented upon were two in number, a man of thirty-two and a woman of twenty-eight. The investi-

gation was carried on for eight weeks, during which time the man had 170, and the woman 205 dreams. They had not previously supposed themselves to be great dreamers, and the large number is accounted for by the fact that pencil and paper were kept at hand and every transient dream was at once recorded on awaking. The first point investigated was the time at which the dreams occurred. It was found that most dreams took place in the morning hours. In one case, 73.2 per cent. occurred after 4 A.M., very few on falling to sleep or before midnight. The next inquiry covered the question of the relation of the character of the dreams to the thoughts of waking life. It was found that in about fifty per cent. the character of the dream was distinctly connected with some waking thought or suggestion, while in forty per cent. some slight or vague suggestion existed.

As to the vividness of dreams, it was found that about one-half could be classed as very vivid or decidedly vivid, so that details could be recalled and a good story written. The most vivid dreams occurred after four o'clock.

A careful analysis of the dreams shows that during this condition the mind may exercise fairly normal activity. That is to say, the dreamer may remember correctly, imagine clearly, and think connectively. The latter phenomenon, however, is rare. The statistics show that in the great majority of cases the dreams are associated with familiar persons and places. The subject matter of the dreams was generally trivial, and the writer concludes that one seldom dreams of the serious problems and emotions that confront him while awake. In times of bereavement one seldom dreams of the dead. Miss Calkins considers it very improbable that the train of thought in dreams is swifter than in waking life. If she is right it destroys the credibility of a good many interesting anecdotes. Thus Napoleon is said to have dreamed of a journey, a siege, and a cannonading, and awoke while some explosion was still reverberating.

Curiously enough, some attention is given to the subject of prophetic dreams and of telepathy. While viewing the subject with commendable skepticism the writer cites several dreams which appear to have a certain previsual or telepathic character. The relationship of certain diseases to dreams is a matter of especial interest to the physician; but here he must himself take up the subject and carry out investigations. We trust that Miss Calkins' article may suggest further work in more strictly medical lines.—*Med. Record.*

### Sir James Simpson's Early Experiments With Chloroform.

Sir James Simpson's daughter has written in the *January Century* an interesting account of the introduction of chloroform in England, and of her father's early experiments in narcotic and anæsthetic drugs. She says:

"Round the table in the well-known dining-room in Dean Terrace it was his custom every evening to have an anæsthetic seance with Drs. Keith and Duncan. Each had a glass or saucer from which to inhale the various substances under trial. On the evening of November 4, 1847, on returning home after a weary day's labor, Dr. Simpson and his two friends sat down to their somewhat hazardous work. Having inhaled several substances without effect, it occurred to Dr. Simpson to try a small bottle of chloroform which he had had, he wrote, 'for several days in the house before trying it, as, after seeing it

such a heavy and involatile-like liquid, I despaired of it, and went on dreaming about others.'

"The tumbler was newly charged, and the inhalers resumed their vocation. Immediately an unwonted hilarity seized the party, which became bright-eyed and very loquacious. Suddenly there was a talk of sounds being heard like those of a cotton-mill; a moment more, then all was quiet; and then a crash. On awakening, Dr. Simpson's first perception was mental: 'This is far stronger and better than ether.' His second was to note that he was prostrate on the floor, and that among the friends about him there was confusion. Hearing a noise, he turned and saw Dr. Duncan beneath a chair; his jaw had dropped, his eyes were staring, his head was bent half under him. He was quite unconscious, and snoring in a most determined manner. More noise still and much motion, and then his eyes overtook Dr. Keith's feet and legs making valorous efforts to overturn the table."

The interest in these experiments was not confined to the master of the house. The butler experimented also—only on the cook. On one occasion, finding some chloric ether in aerated water, he gave a glass of it to the cook, who, drinking it hastily, fell down unconscious. The butler rushed into the dining-room, saying, "For God's sake, sir, come down! I've pushed the cook." After the woman was restored to consciousness the man was chary and contemptuous of any other concoction, and to the end repeated stubbornly his sentiment, "Chloro's the thing."

### Avoidable Results and Essential Precautions in Vaccination.\*

During the present season, there has been a large amount of vaccination done throughout this State and reports have come to us from numerous quarters concerning the prevalence of vaccine disease, especially among school-children, and the results.

First the vaccine which has been used is the cowpox virus obtained from some of the many establishments that now guarantee to physicians a supply of pure animal vaccine. The use of the humanized or Jennerian virus seems to be almost a thing of the past. Nevertheless a few physicians still prefer the humanized virus, one remove from the cow, using for vaccine material the clear lymph of a healthy child, taken about the seventh day; and it has been affirmed that this virus acts more mildly than the animal vaccine, while being equally efficacious in conferring immunity.

With regard to the results of vaccinations, the vaccine disease seems in most cases to have run a fairly typical course, occasionally being of rather severe character. The unusual number of cases of marked general vaccinia eruption is to be accounted for by the unusual number of cases of vaccinia now in the community and in proportion to the total number of children undergoing vaccination at one time is not probably at all increased. In one school in the vicinity of Boston there were about a hundred children successfully vaccinated (primary vaccination); of this number fifty per cent. continued their attendance at school without any interruption; twenty-five per cent. were obliged to absent themselves from school for a few days only, while the other twenty-five per cent. were confined to their homes for more than a week.

\*From the *Boston Medical and Surgical Journal*.

A physician living in one of the cities on the coast writes us that in his locality there have been an unusual number of severe cases of vaccine disease. He has never before seen so many "bad arms," and some children have been very sick. All the physicians in that vicinity have used virus obtained from the — Vaccinal Institute. He has observed from the twelfth day intense inflammatory oedema develop around the point of vaccination, then lymphangitis and cellulitis, fever and other general symptoms of a septicæmic character, finally an extensive cutaneous necrosis in the region of the vaccination. In one instance (in which about the whole city was interested) he despaired of the life of his patient; fortunately the child is now recovering, but with a large slough at the point of vaccination. He believes that in this, as in other similar but not so violent cases, there was a complication of erysipelas due to the introduction of the streptococcus by scratching. Other physicians in the same locality have had cases of a similar nature, and it has been believed that the vaccine obtained on certain occasions from — farm was of a particularly virulent nature. The cellulitis, erysipelas or lymphangitis which have caused such dire alarm and opposition to vaccination are to be explained by the same principles as under any other surgical operations; some contamination of the wound by micro-organisms. In vaccination the physician has not a complete control of the whole chain of a sepsis; he must trust to the honesty and cleanliness of the vaccine establishment, which should be above suspicion.

Our correspondent writes that the ivory points in those packages were stained red, as if from admixture of blood; this certainly indicates that sufficient care was not taken in charging the points.

These facts show that the owners of vaccine establishments have a responsibility to physicians and to the public of which they cannot be too mindful. They are expected to furnish vaccine of unexceptionable quality; obtained from healthy heifers, at just the right time, and under conditions of perfect cleanliness and asepsis. The lymph which is furnished should be clear lymph, not lymph and blood or pus.

Physicians, too, have a responsibility in every case of vaccination, and this little operation should not be performed in a hasty and slovenly manner. Though antiseptics may not be used during the operation, as likely to interfere with the result which is sought, yet vaccination should be performed with perfectly clean instruments and aseptically. The scarification may be made with the ivory points themselves, or with a fresh needle for each case, which in addition may be passed through an alcohol flame. Some physicians wisely make a practice of washing the arm before vaccination. All should do so. The same point should never be used on two patients; we fear this has been done, though very exceptionally.

What shall be done with the vaccinated arm? Some apply immediately after the operation a little isinglass plaster over the abraded surface, the vaccine being allowed to dry in, and the plaster having previously been dipped in boiling water. The piece of plaster is taken off next day, and the arm covered with some antiseptic dressing, such as carbolic gauze. This might be expected to be sufficient to protect the vaccine sore from extraneous germs, the gauze being renewed every day. The dried lymph may be covered by aseptic gauze or cotton glued to the arm at the edge with collodion.

We know physicians who take these precautions every time they perform vaccination. It would probably be better that all should. The vaccinated person is provided with a roll of antiseptic gauze for daily dressings, according to the strict directions of the physician. In this way, the danger that foreign microbes (staphylococci, streptococci, etc.) may enter the solutions of continuity caused by the vaccine disease, and thus add to this disease the evils of microbial associations — and we well know how much in some diseases, as diphtheria, the original virulence is intensified by such associations — this danger, we repeat, is thus likely to be reduced to a minimum.

It might be better that vaccine farms should be established and managed by the State, the points being sold at cost or furnished free. Such a proposition is at present under consideration in this State. Where there is a good State Board of Health, a proper supervision for such a farm or farms already exists.

### Guaiacol as an Antipyretic.

The *Medical News* for January 27 publishes a portion of a lecture delivered at the Pennsylvania Hospital on January 13 by Dr. J. M. Da Costa, of Philadelphia, entitled *Clinical Remarks on the External use of Guaiacol in Reducing High Temperature in Typhoid Fever and Other Febrile Diseases*.

Dr. Da Costa thinks that the action of guaiacol is somewhat inferior to that of the cold bath as regards promptness, but he has observed that the reduction of temperature which it produces is more lasting. He thinks it preferable to the use of cold baths, particularly in cases where proper appliances for administering the baths are wanting, and where from the nature of the case it is particularly objectionable to move the patient.

The odor of guaiacol is an objection to its use, and this Dr. Da Costa has not yet been able to overcome. Oil of bergamot has been tried, but the odor of guaiacol overcomes that of the bergamot. Cologne water and oil of sassafras also have been tried, but the best result has been obtained with oil of cloves. Guaiacol is to be rubbed upon the skin of the abdomen or thigh with a camel's-hair brush over a space previously washed with soap and water.

The largest amount that has been applied at once in Dr. Da Costa's experience is sixty drops, but from the application of fifty drops he has witnessed effects that cause him to advise that rarely should so large a dose be used. Thirty drops he thinks about the average dose. The guaiacol is to be rubbed in slowly, and the surface to which it is applied need not be uncovered, for the application can be made under the bedclothing, and it is well to cover the surface with a piece of lint and with waxed paper. The dose should be proportionate to the height of the fever; with a temperature of 103° F. it should not exceed twenty minims at the first trial.

It is not necessary to rub the guaiacol in, but if friction is not used the effect is neither so rapid nor so complete. The quickest way is to paint the guaiacol on the surface and then rub it in with the hand. Five minutes are enough for the purpose. The sensation, which is not unpleasant, is likened to that produced by the application of menthol.

Dr. Da Costa thinks that guaiacol is absorbed by the skin and that it is carried by the circulation to the heat centers, upon which it acts as an antithermic. Apparently its action does not involve the

depression that follows the use of antipyrine, phenacetine, and other remedies belonging to the coal tar products. Moreover, it produces less sweating.

In no instance under Dr. Da Costa's observation was there any albumin in the urine or any sign of kidney irritation detected that could be imputed to the use of guaiacol; nevertheless, he advises close examination of the urine in all cases in which the remedy is used.

### Coloring Medicines

Coloring medicines is recommended by F. Baron Von Oefele (*Pharm. Centralh.*, 1893, xxxiv., p. 683), on the grounds of the desirability of changing the appearance of medicines from time to time, and of distinctively marking strong and mild remedies. The following examples are given:

Formic acid..... 30 Gms. (5 drs.)  
Blue pyoktanin..... 1 Ctg. (1 gr.)

#### REVULSIVE.

Soft soap..... 100 Gms. (3½ oz.)  
Lanolin..... 10 Gms. (2½ drs.)  
Blue pyoktanin..... 5 Ctg. (½ gr.)

#### FOR INUNCTION, IN ECZEMA.

Potassium iodide..... 3 parts  
Starch..... 3 parts  
Hot water..... 5 parts  
Boil, and add

Lanolin..... 20 parts

As iodine becomes liberated, while the mixture is preserved, the ointment will turn violet owing to the formation of starch iodide.

As methylene blue is, in itself, employed as an antipyretic, the author recommends adding it to quinine, antipyrine, etc., as follows:

Antipyrine..... 50 parts  
Methylene blue..... 1 part

Medicines containing hydrocyanic acid should be colored with soluble Prussian blue, as in the following formula:

Morphine hydrochlorate..... 10 Ctg. (½ gr.)  
Bitter-almond water..... 10 Gms. (2½ fl. drs.)  
Prussian blue (soluble)..... 1 Mg. (½ grain.)

The author gives also the following formulæ:

1—Carlsbad salt..... 20 parts  
Gamboge..... 1 part  
2—Acetanilid..... 3 Ctg. (5 grs.)  
Rhubarb..... 3 Ctg. (½ grs.)  
3—Alum..... 40 Ctg. (6 grs.)  
Saffron..... 10 Ctg. (1½ grs.)  
4—Calomel..... 15 Ctg. (2½ grs.)  
Cinnabar..... 15 Mg. (½ grs.)  
Sugar..... 30 Ctg. (5 grs.)

### The Local Treatment of Diphtheria.

Dr. A. Jacobi, of New York, at the recent meeting of the New York State Medical Society at Albany said that he believed that the local treatment of diphtheria was best studied on external wounds or on diphtheria of the vagina. One should not use powders in the treatment of laryngeal diphtheria, as they were apt to produce nausea.

Bad-tasting and nauseating medicines of all kinds should also be avoided. It should be remembered that gargles were effective only as far down as the pillars of the soft palate; therefore most of the gargling was useless.

The dangers in diphtheria were, first, from suffocation; second, from heart failure and exhaustion; and, third, from sepsis. Sepsis and a fatal termination usually occurred in cases in which the nares were affected.

The diphtheritic membrane should be destroyed by local applications of a mixture of equal parts of carbolic acid and glycerin, which was more effective than chlorine water.

In general, local applications would be

allowed by adults and large children. Smaller children would struggle and become exhausted if applications were attempted. The struggling was a serious matter with small and very sick children; besides, it was possible in such cases, as a rule, only to reach the tonsils with the application, and sepsis did not usually take place through this avenue. It was better with small children to give internally medicines which were easily absorbed, including iron, mercury, chlorine, and iodine.

The form of diphtheria which was most dangerous was that which attacked the nares and the nasopharynx. In some cases the diphtheritic membrane was tough, in others soft and easily macerated. In the latter cases the virus was most readily absorbed.

Where it was possible, it was well to apply medicines to the throat with cotton wrapped upon a long probang, and they should be applied as thoroughly as possible to the entire membranous surface.

If the nares were affected, the medicine might be poured into the nose with a feeding cup, or a small syringe might be used. The use of an irrigator for the nose was not without danger. Applications should be made with the patient in a recumbent or semi-recumbent posture. Mild applications, including salt water and lime water, would also be found useful in many cases for their cleansing effects, also carbolic acid, creolin, and weak solutions of bichloride of mercury.

Papayotin, in a five-per-cent. solution, or trypsin of similar strength, combined with bicarbonate of sodium, was also useful. For the treatment of adenitis associated with diphtheria, preventive and curative measures should be used. Ice would be effective in some cases. Iodoform, if given by injection, was too painful. If the swelling was extensive, long and deep incisions should be made, and they should be made as early as possible in the history of the disease.

In cases in which hemorrhages occurred, suitable astringents should be used, but solutions of iron should never be used to check hemorrhage. The paralyzes of diphtheria should be treated by means of friction.

The most urgent cases were those in which the muscles of respiration were involved. If electricity was used, one must be careful that the muscles were not overstimulated.

### Influenza in 1775.\*

By AUGUSTIN PRICHARD, F.R.C.S. Eng.,  
M.D. Berlin.

Consulting Surgeon to the Bristol Royal Infirmary.

While looking over some very old documents connected with Quaker families of the last century I found the following paper. It is dated Dec. 6, 1775, and is apparently a copy written in the even, round hand which was peculiar to the Quakers, and signed by John Fothergill, London, himself a staunch Quaker and a very successful and most charitable physician, who began practice before 1760. No disease is named in the paper, but it seems to be so complete and graphic an account of influenza, as we now know it, that I have made a copy of it, *verbatim et literatim*, thinking it worthy of a place in *The Lancet*. On searching for some account of the earlier days of the College of Physi-

cians I found in a book called "Physic and Physicians" a notice of John Fothergill, in which it says: "During the prevalence of the influenza in the year 1775-6 (Old Style), he is said to have attended sixty patients a day, and his profits were estimated at £8,000 a year"; and this sentence identifies the disease thus described.

### A SKETCH OF THE LATE EPIDEMICK DISEASE AS IT APPEARED IN LONDON.

"About ye beginning of the last month it was mention'd to me in many families that most of the servants were sick; that they had colds, coughs, sorethroats and various other complaints. In the space of a week these complaints became more general, few servants escaped them, especially the men, who were most abroad; many of the other sex, likewise, and people of higher condition were attacked; nor were children wholly exempted. The disease, which had hitherto been either left entirely to itself, or had been treated with the usual domestick medicines appropriated to colds, now claimed the attention of the faculty, and for the space of near three weeks kept them for the most part universally employed. Most of those whom I saw were seized (and often so suddenly as to be sensible of the attack) with a swimming or slight pain in the head, a soreness of the throat and all over the body, with a sense of coldness, particularly in the extremities. A cough soon followed, a running of the nose, watery eyes, slight nausea, frequent calls to make water, and some were seized with a diarrhoea. More or less of feverish heat, inquietude, pain about the breast, præcordia, and in the limbs soon succeeded, but in various degrees. Many were capable of continuing in their usual occupations under these symptoms; others were obliged to submit to confinement, and not a few to their beds. The tongue was always moist, the skin seldom remarkably hot or dry; the pulse often full, quick, and harder than one would have expected from such a temperature of the skin. Several were seized with diarrhoea; the stools were always black or of a deep yellow color; and so were those for the most part which were procured by purgative medicines.

"In a few days every complaint abated except the cough; this continued the longest of all the symptoms, and in the forepart of the night was exceedingly troublesome and vexatious; towards morning generally came on a sweat and easy expectoration. Those who were seized at first with very copious defluations from the nose and the fauces or had a plentiful and spontaneous discharge of black bilious stools, or made large quantities of a high-colored urine, or sweated profusely of their own accord a night or two after the seizure, soonest grew well.

"In many cases it was necessary to take away some blood, the condition of the pulse and the vehemence of the cough making it necessary. The blood was almost uniformly sily, representing a flat cake of yellowish tallow floating in a deep yellow serum; very few instances occurred where the size formed that cup-like appearance which occurs in most of the genuine inflammatory disorders. By warmth, diluting cooling liquids, mild diaphoreticks, gentle and repeated purgatives the disease for the most part soon gave way, in subjects otherwise healthy. Sometimes it was necessary to repeat the bleeding; sometimes blisters became necessary, and were serviceable in abating

the cough which was the last of all the symptoms that gave way; after the necessary evacuations, anodynes for the most part had very salutary effects. In many instances the disease assumed the type of an intermittent towards its decline; the bark however did not generally succeed in curing it. The symptoms, as often happens in bilious disorders, were sometimes aggravated by this medicine. A few doses of some mild cathartick most commonly removed it effectually.

"Many who neglected themselves and went abroad with the distemper upon them frequently got additional colds and brought on a fever of a most dangerous kind; a few died phrenetick. Ancient, asthmatic persons were likewise great sufferers, for the most part a peripneumonick fever came gradually on which often terminated fatally, and of those who did recover their amendment was slow and medication difficult. And indeed it appeared that very few persons wholly escaped the influence of this morbid constitution; for it seemed to aggravate every present malady. It proved fatal likewise to several very young children, disposing them to violent coughs or diarrhoeas. Perhaps however there is scarcely an instance to be met of any epidemick disease in this city, where so many persons were seized in so short a time and with so little comparative mortality.

"Though attempts to ascertain the causes of epidemics are for the most part more specious than substantial, it may not be improper to mention a few facts that gained my attention; to others many more may have occurred and worthy to be recorded. During the greatest part of the summer in that part of the country where I then was (Cheshire) the air was of the most equal temperature I ever knew. In the space of two months the quicksilver in the thermometer once rose to 68, once fell to 56; but for six weeks together it kept between 60 and 66, day and night. The barometer did not vary much more. The weather was during this time very changeable, much inclined to wet; and though it rained more or less almost every other day for six weeks, yet upon the whole no unusual quantity of rain fell; it sunk into the ground as it fell and made the earth very soft and miry; but seldom swelled the brooks or occasioned floods. During this time horses and dogs were much affected; especially those that were well kept. The horses had severe coughs, were hot, forebore eating and were long in recovering. Not many of them died, that I heard of, but several dogs.

"To the consideration of the faculty in this city is this sketch of the late epidemick submitted with all due deference and with a request that if the observations they have made do not correspond with this recital they will be pleased to communicate their remarks while the remembrance of the facts are recent; in order that as exact an account of this disease as possible may be transmitted to our successors. If those physicians in the country into whose hands this essay may come will be so obliging as to mention the time when this epidemick made its appearance in their neighbourhood and wherein it differed from the preceding sketch either in the symptoms or method of cure they will likewise contribute to the same good purpose. The united observations of the faculty at large must greatly exceed the utmost efforts of any individual, however warmly he may be disposed to promote the utility of his profession.

"JOHN FOTHERGILL."

LONDON, Dec. 6th, 1775.

\*From the London Lancet.



## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**The Composition of Saliva and Perspiration.** E. H.—The following facts regarding the secretion and composition of saliva have been compiled from various sources: The quantity of mixed saliva (and fluid of the mouth) secreted in 24 hours amounts to 800–1500 grains; during the process of chewing in 30–58 minutes, 500–700 grains. The composition of saliva is thus stated by Berzelius:

Water.....	994.9 parts
Pyralin.....	1.2 parts
Mucin, epithelium and mucin.....	1.3 parts
Fatty matters.....	1.4 parts
Salts.....	1.5 parts
Chloride of potassium and soda.....	0.9 parts
Lactate sodium and animal matter.....	0.9 parts
Sodium.....	0.2 parts

He places its specific gravity at 1.008, though other chemists give the figures 1.002–1.006 and state that it contains 5 per cent. of dissolved solids made up of varying quantities of globulin, serum, albumin, mucin, salts including potassium thiocyanate, and frequently toxin, and various suspended constituents (epithelial scales, leucocytes). Saliva has the power of converting starch into maltose, a small quantity of glucose and dextrin being formed at the same time.

The perspiration of the body is a clear, colorless liquid of marked odor and salty taste; when largely admixed with sebum it is acid; otherwise alkaline. It contains 1–2 per cent. of solids (sodium chloride, fatty acids, neutral fats and cholesterin).

**Hall's Catarrh Cure.** F. L.—The following is said to be the composition of the above:

Potassium iodide.....	3 i
Comp. tinct. cardam.....	fl. 3 iv
Comp. tinct. gentian.....	fl. 3 xii
Caramel.....	q. s.

**Saul's Catarrh Remedy,** used by inhalation, is said to be composed of the following ingredients:

Comp. tinct. benzoine.....	fl. 3 ii
Tinct. tolu.....	fl. 3 ii
Chloroform.....	fl. 3 i
Sulphuric ether.....	fl. 3 i
Aromatic spirit ammonia.....	fl. 3 i
Oil of tar.....	fl. 3 i
Alcohol.....	fl. 3 v

**California Fig Syrup.** E. E. F.—The following is said to be the formula for the above:

Fl. ext. cascara sagrada (tasteless) 1½ fl. ounces	
Fl. ext. Oregon grape root.....	3 drachms
Grd. senna, No. 20, powder.....	6 drachms
Prunes.....	2 oz. av.
Figs.....	2 oz. av.
Oil of fennel.....	22 10 min.
Oil of cinnamon.....	5 min.
Oil of cloves.....	3 ounces
Sugar.....	1 pint
Water, enough to make.....	

Chop the figs and prunes, without stones, to a fine hash, mix with senna, and steep in 12 ounces water for three hours, adding sufficient to replace the water of evaporation. Strain through a No. 40 wire sieve. To this liquid add the sugar and dissolve. Add the fluid extracts and oils, make up to one pint with hot water, which has been poured over the fruit on a sieve.

**Chemical Journal.** B. E. N., Binghamton, N. Y.—The *Journal of Analytical and Applied Chemistry* was formerly published at Easton, Pa. It has now been merged into the *Journal of the American Chemical Society* which is published at the same place by the Chemical Publishing Co.

## Miscellaneous Formulas.

### FOR ITCHING.

[A. F. THOMPSON—N. C. Med. Journ.]

#### LOTION.

Lead acetate.....	16 grs.	( 1 Gm.)
Dilute hydrocyanic acid.....	1½ fl. drs.	( 5.5 Cc.)
Alcohol.....	fl. drs.	( 15 Cc.)
Distilled water.....	7½ fl. oz.	( 222 Cc.)

Externally.

### FOR CHILBLAINS.

[Dr. JAS. R. WOOD.—M. M. Report.]

#### OINTMENTS.

1—Zinc oxide.....	1 dram ( 4 Gms.)
Powd. camphor.....	of each, ¼ dram ( 2 Gms.)
Powd. myrrh.....	
Powd. opium.....	
Lard.....	1 ounce ( 31 Gms.)
2—Calcium chloride.....	¼ dram ( 2 Gms.)
Spermoceti.....	1 ounce ( 31 Gms.)

#### LOTIONS.

1—Oil turpentine .....	4 fl. ozs.	(120 Cc.)
Water ammonia .....	2 fl. ozs.	(59 Cc.)
2—Soap liniment .....	6 fl. ozs.	(177 Cc.)
Tincture cantharides.....	1 fl. oz.	(30 Cc.)
Oil origanum.....	2 fl. drs.	(7.5 Cc.)
3—Oil turpentine.....	of each, 1 fl. oz.	(30 Cc.)
Balsam copaiba.....		
Camphorated oil.....	2 fl. ozs.	(59 Cc.)
Tincture opium.....	of each, 1 fl. oz.	(30 Cc.)
Tincture myrrh.....		

### NEURALGIA MIXTURES.

[Chemist and Druggist.]

I. Pot. bromid.....	gr. x
Quin. sulph.....	gr. ij
Ac hydrom dil.....	fl. v
Butyl-chloral hydrat.....	gr. ij
Aq. chloroform, ad.....	3 ss

Every two hours.

II. Ammon. chlorid.....	gr. v
Ferri et quin. cit.....	gr. ij
Tinct. acconiti.....	fl. v
Tinct. gelsemii.....	fl. v
Aq. cinnamomi ad.....	3 ss

Every two hours.

III. Succ. conii.....	fl. xv
Succ. hyoscyami.....	fl. xv
Liq. strychnin. hyd.....	fl. ij
Syrup. rhæados.....	3 j
Aq. menth. pip. ad.....	3 ss

Every three hours.

IV. Antipyrin.....	gr. v
Caffeine.....	gr. j
Tinct. gelsemii.....	fl. v
Tinct. card. co.....	3 ss
Aq. aurantii flor. ad.....	3 ss

Every three hours.

### FOR CORYZA.

[GRELLETY.—Sem. Med.]

Mix and use as a snuff.

Betol.....	3 iiss
Menthol.....	gr. xv
Cocain hydrochlorate.....	gr. ix
Powdered roasted coffee.....	3 ss

### CARMEL MONK'S LIQUOR.

[Chemist and Druggist.]

Angelica root.....	ii j
Aniseed.....	x
Lemon peel.....	v
Carlander seed.....	x
Nutmeg.....	vij
Fresh marjoram leaves and flowers.....	v j
Fresh melissa-leaves.....	i
Cloves.....	vij
Fresh rosemary leaves and flowers.....	x
Fresh sage leaves and flowers.....	xiv
Fresh thyme.....	v j
Fresh hyssop.....	vij
Cinnamon.....	x
Proof spirit.....	Cong. xij

Macerate for three days, then distill 10 gallons, and to the distillate add 10 gallons of simple syrup (1 in 2).

### FOR GASTRIC ULCER.

[STRIPP.—Wiener Med. Presse.]

Bismuthi subnitrat.....	3 jss
Chloroform.....	fl. 3 ss
Aque.....	fl. 3 x.—M

Two tablespoonfuls, from three to six times daily.

### WINDOW-POLISHING PASTE.

[Chemist and Druggist]

Castile soap.....	2 ozs.
Boiling water.....	2 ozs.

Dissolve, and add the following in fine powder:

Precipitated chalk.....	4 ozs.
French chalk.....	3 ozs.
Tripoli.....	2 ozs.

Mix, and reduce with water to the consistency desired.

### SEVEN SUTHERLAND SISTERS' HAIR GROWER.

*New Idea* says the following formula produces a preparation closely resembling the original:

Bay rum.....	5 vij
Distilled witch hazel.....	3 ix
Common salt.....	3 j
Hydrochloric acid (5 per cent.).....	1 drop
Magnesia.....	A sufficiency

Mix the bay rum and distilled witch hazel, and shake with a little magnesia; filter, and in the filtrate dissolve the salt and add the hydrochloric acid.

### GILDING PASTE FOR METALS.

Gold chloride.....	2 parts
Potassium cyanide.....	6 parts
Cream of tartar.....	¼ part
Prepared chalk.....	10 parts
Water.....	10 parts

Mix. Apply with a woolen rag to the metallic surface, previously carefully cleansed by the application of a mineral acid.

### Syrup of Quinine, Iron, and Calcium Lactophosphate.

E. Stern contributes the following formula to the *Pharmaceutische Post*:

Quinine sulphate.....	2 parts
Distilled water.....	( of each enough
Dil sulphuric acid.....	for solution
Ammonia water.....	a sufficient quantity
Lactic acid.....	2 parts
Calcium lactophosphate.....	6 parts
Iron lactate.....	3 parts
Hot distilled water.....	12 parts
Hot syrup.....	175 parts

Dissolve the quinine sulphate with a sufficient quantity of diluted sulphuric acid and distilled water, precipitate with ammonia (water), filter, and wash carefully. Dissolve the pure quinine in the lactic acid, and add to the syrup. Then dissolve the iron lactate and calcium lactophosphate in the hot distilled water, in a mortar, add to the syrup and filter. Each teaspoonful contains, approximately, 5 centigrammes (¼ grn.) of quinine lactate, 7 centigrammes (1½ grn.) of iron lactate, and 15 centigrammes (2.8 grn.) of calcium lactophosphate. It is described as of bright yellow, clear color, and pleasantly bitter and somewhat acid taste; it leaves no disagreeable metallic taste in the mouth, keeps very long without losing its therapeutic activity, and deposits no sediment on standing.

**For Pulmonary Tuberculosis.**—Strizower (*Wiener klin. Wochenschr.*, 1894, No. 8, p. 48) recommends inunctions of mercurial ointment. A half-drachm of the ointment is rubbed into the skin daily, and a warm bath is taken after every fourth inunction. It is not claimed that the treatment is infallible or universally applicable. In cases in which it fails to do good, however, it at least does no harm.



# News and Notes.

## Gotham Gossip.

Newspaper cosmetics and therapeutics are very wonderful things in their way, as witness the following excerpt from Sunday's *New York Recorder*:

### A JAR OF COLD CREAM.

HOW IT MAY BE MADE ECONOMICALLY AT HOME.

The basis of cold cream is always mutton tallow. You can get this at the butchers', and if you tell him what it is for he will select some very fine tallow. Cut the tallow into bits and put it into a saucepan without any water. Set the saucepan into a jar of boiling water and let all remain until the fat is thoroughly "fried" out of the tallow. Strain through a fine sieve, and while it is still warm stir in a teaspoonful of the essence of camphor to every cup of tallow. Next a tablespoonful of your favorite perfume, and stir until all is a sweet smelling liquid. Before it has had time to cool pour in a little toilet jar and set upon the ice over night. It will keep indefinitely, and will be found one of the best remedies in the world for skin that gets rough and "winter sore."

Fancy a candidate for examination giving such a formula as the above for cold cream! The soda water boy himself having been called upon occasionally to stir the ointment of rose water could do better than this.

The unexpected good that may come of methodical habits was strikingly illustrated the other day in a civil suit being defended by I. O. Woodruff, the manufacturing chemist, of Maiden lane. It so happened that a record of his personal expenses would be of material bearing on the case. He therefore produced a series of slips of paper, on one side of which was an abstract of what he had done on each day and on the other the minutest item of his personal expenditures, including stamps, car fare, etc. All this was written in a hand so microscopic as scarcely to be decipherable by the naked eye. These records he was prepared to produce for the past thirty years, and they alone were sufficient to practically determine the case in his favor. Mr. Woodruff explained that as a boy he had been compelled to keep this record; any money expended and not accounted for being deducted from the next week's allowance.

Vivat Bacchus, Bacchus lebe;  
Bacchus war ein edler man.

And right royally he reigned, sharing his throne with Terpsichore last Friday night at Madison Square Garden. The *Arion Gesang Verein* turned that big oval barn into a bower of roses and beauty and music and mirth. From the high arched dome hung festoons of flowers an eighth of a mile long, while the fronts of different tiers of seats were all covered with greens and flowers. A wide promenade between the arena boxes and the dancing floor was railed off from the latter by a colonnade of 36 columns, each bearing a globe surmounted by a nearly life-sized, winged figure of Vanity holding in her hand a mirror. Two immense orchestras located on the galleries on either side furnished music in alternation. The procession of floats which moved around the hall at eleven o'clock was gorgeous and in most instances artistic. Following in the wake of the float showing Fashion and her votaries were personifications of various toilet accessories, among which was "Arion's Honey and Almond Cream," a tribute to A. S. Hinds' article. Among those noted by the Gossip in the arena boxes were: A. C. Behrends, the vigorous president of the Ph. G. Bowling Club, his partner M. Arne-mann and wife, and Louis Kessell and wife. In strolling about the promenade I saw a number of other druggists also, among whom were: H. Jarrett, of the

Mallinkrodt Chem. Co.; L. Amend, of Eimer & Amend; Eugene Kessler, of Paul Balluff's successors; B. G. Kraft, proprietor of Wanier & Ingard's old store; L. Roediger, Albert Eich and S. Miller, both of Tenth avenue; Otto Frohwein, of Fourth avenue; E. L. Fendler, of Broadway; Emil Vockroth, of Jersey City; Mr. Reinhold, who now hails from Harlem, and Mr. Imhoff, of Amsterdam avenue.

*The Shipping and Commercial List*, a New York paper devoted to market and shipping news, has passed into the hands of D. O. Haynes, of Detroit, Mich., the well known proprietor and publisher of the *Pharmaceutical Era*. The *Oil, Paint, and Drug Reporter* will now have to look well to its laurels, as *The Shipping and Commercial List*, under the management of Mr. Haynes, is sure to prove a formidable rival in their field.

## Drug Trade Section of the New York Board of Trade.

The regular monthly meeting of the drug trade section of the New York Board of Trade was held February 15. Thomas F. Main, the chairman, presided. Mr. Hartford, chairman of the committee on membership; Mr. Rogers, of the committee on legislation, and Mr. Stallman, chairman of committee of importers of drugs and chemicals, reported satisfactory progress. Mr. Rogers directed attention to the new pure food bill now before the House of Representatives, and by his request it was referred to the legislative committee; the text of the bill is published elsewhere in this issue. Communications were read from the Philadelphia and New England Drug Exchanges referring to interchange of ideas and co-operation; it was the sentiment of the meeting that the movement started by Mr. Rogers, the former chairman of the section, to bring the drug associations closer together be continued.

Mr. Main announced the following standing committees for the year, and then the meeting adjourned.

Standing Executive.—Samuel W. Fairchild, of Fairchild Bros. & Foster; Wm. Hull Wickham, of McKesson & Robbins; James Hartford, of Schoellkopf, Hartford & MacLagan, Ltd.; Thos. F. Main, of Tarrant & Co.; John M. Peters, of Fraxer Tablet-Triturate Manufacturing Co.

Membership.—James Hartford, of Schoellkopf, Hartford & MacLagan, Ltd.; Albert Bruen, of Bruen Bros. & Ritchey; C. S. Littell, of R. W. Robinson & Son; Samuel M. Moneyenny, of S. G. McCotter & Co.; W. H. Raser.

Legislation.—Albert Plaut, of Lehn & Fink; Frederick G. Meyer, of Meyer Bros. Drug Co.; Geo. R. Hillier, of R. Hillier's Son Co.; Christopher L. Williston, of Charles Pfizer & Co.; Andrew B. Rogers, Jr., of Rogers & Pyatt.

Arbitration.—John Clay, of Parke, Davis & Co.; John L. Riker, of J. L. & D. S. Riker; C. E. Tyler, of Tyler & Finch; Joseph Velsor, of Peck & Velsor; Frederick M. Robinson, of R. W. Robinson & Son.

Jobbing Druggists.—William S. Mercereau, of W. H. Schieffelin & Co., chairman, and one representative from each jobbing drug house in the drug trade section.

Manufacturing Chemists.—Harry T. Jarrett, of Mallinkrodt Chemical Works; William A. Hamann, of the Roessler & Haasacher Chemical Co.; B. H. Huttman, of Glatz & Huttman; Edward H. Kidder, of New York Coal Tar Chemical Co.; Howard Kirkland, of New York Quinine & Chemical Co.

Manufacturing Perfumers.—Sturgis Coffin, of Ladd & Coffin; Theodore Ricksecker; Henry Dalley, Jr., of Lazell, Dalley & Co.; Bowles Colgate, of Colgate & Co.

Manufacturing Pharmacists.—Benjamin T. Fairchild, of Fairchild Brothers & Foster; Samuel W. Bowne, of Scott & Bowne; A. H. Mason, of Seabury & Johnson; E. Stoffregan, of Sharp & Dohme; Charles Killgore.

Importers of Drugs and Chemicals.—John H. Stallman, of Stallman & Fulton; George Massey, of Lanman & Kemp; Theodore Weicker, of Merck & Co.; Francis H. Sloan, of Dodge & Olcott; John J. Riker, of J. L. & D. S. Riker; Bernard G. Amend, of Eimer & Amend; Victor Koebel, of Schulze-Berge & Koebel.

Importers of Essential Oils.—George H. Olcott, of Dodge & Olcott; Carl Brucker, of Fritzsche Bros.; James B. Horner, and others to be named.

## Telephone Troubles in Brooklyn

At the meeting of the Kings County Pharmaceutical Society held at the college on Tuesday, February 18, a committee of three, consisting of Messrs. France, Bliss and Werner, was appointed to confer with a like committee from the Kings County Medical Society and the Homeopathic Medical Society to the end that united action be taken to oppose what they call the unwarranted action of the telephone company in forcing them to have pay stations in their stores.

Recently an order was issued by the company forbidding others than the owners from using a telephone without payment. The druggists and doctors took exception to this and are in no mood to be imposed on. They claim that they were the first to use the telephone and did more to make it popular in this city than any other class and still comprise more than half of the subscribers. When it was originally introduced the company, the druggists claim, induced them to hire a telephone, as it would be a great accommodation to their customers. Now the druggists contend that the company is nothing more than a grasping monopoly trying to force pay stations in every drug store to the detriment of the poor people who are obliged to use it in calling physicians, etc. The following letter was read and received with applause. It created some discussion:

To the President and Members of the Kings County Pharmaceutical Society.

GENTLEMEN: The question of the use of telephones in this city has assumed a serious form and is one of no mean proportions. I hardly believe that the druggists realize the object of this gigantic monopoly in forcing them to place pay stations in their stores or to have their old phones taken out. The discrimination that is observed against our profession by this company is extraordinary; for example: If the company cannot force a pay station into your store under a guaranty of \$12.50 per month, it will try \$10 and so down to no guaranty, as in my case, when the representative of the company offered me a one-month contract and no guaranty to see how I would enjoy charging the medical fraternity and unfortunate customers who desired the services of their physicians for the benefit of the company, which claimed 80 per cent. of these charges. There is a certain druggist on Fulton street who objected to having a pay station in his store. The company compromised with him by placing his old phone in the rear room at the same rental for the privilege of having a pay station in the store, allowing him 50 per cent. of the charges.

Have the members of the profession ever taken time to consider the meaning of this discrimination, the true intent of these threats, and the bulldozing methods which this company has adopted during the past six months? The plain intention is to cut off all free communication from subscribers who desire to communicate with their offices or places of business.

Brother members, the question that now confronts you is, Can we allow this company to drag us down from the high position we hold in this city?

What will its citizens think?

What will the medical fraternity say?

What will our brother members in other cities think when they find that Brooklyn druggists have surrendered and are in the grasp of this gigantic monopoly, whose only characteristic is greed?

I do not ask my brother druggists to take up my cause, for I am through with the company, as I never intend to become a subscriber until it returns to honorable business methods; but I do ask you to take action that you may repel this scheming monopoly from lowering the standing of our profession.

Very respectfully yours,

FEBRUARY 13, 1894.

THOMAS J. FRANCE.

President Brundage said that the telephone matter was one in which every druggist was interested. In Baltimore, he said, the telephone company did what the local company is trying to do here, and the physicians and druggists appealed to the Maryland legislature. It resulted in the charges on 'phones being reduced and a loss of 60 per cent. of the subscribers. Other members spoke and it was agreed that the members stand together. The joint committees will call on the telephone company and ask that better arrangements be made. If the latter refuses, action will be taken at the next meeting.

which may result in all druggists removing the instruments from their places of business.

There were two papers read as reported last week, one on the preparation of citrate of magnesia and one on the preparations of the new pharmacopoeia, the former by W. B. Averre, and the latter by Dr. J. F. Golding. A discussion followed. The committee appointed in December to confer with District Attorney Ridgway concerning the sale of drugs in dry goods stores by unlicensed clerks reported that he promised to take action, but had done nothing. The League plan was endorsed.

### The U. S. Capsule Co. in the Courts.

The courts have been appealed to to settle a dispute among the stockholders of the United States Capsule Company. This company, as was stated in our issue of December 14, was organized for the purpose of consolidating the Merz Capsule Co., the Warren Capsule Co., and the Michigan Capsule Co., of Detroit, and National Capsule Co., of Indianapolis.

The attorneys for the U. S. Capsule Co. make the following statement:

"The reason for this consolidation was that the several companies above mentioned possessed different patents and operated under different processes, each of which had its special merits and points of advantage. It was desired to unite all of the advantages which were possessed by the various processes belonging to the respective organizations in order to produce a better capsule, and one which would more fully meet the requirements of the trade. The combined capacity of the four plants will be greater than the aggregate capacity of the plants operated separately and the cost of production more economical. After the United States Capsule Co. was organized each of the other companies conveyed all of its plant and property to the new company and received stock in payment therefor. The intention of the new company was that the old plants should continue to be operated under substantially the same management as heretofore. After the consolidation was completed and all the property had been transferred, the Merz Capsule Co. refused to deliver the property which it had agreed to convey, and for which it had executed and recorded a bill of sale, and has filed a bill to set aside the conveyance and the agreements under which the consolidation was effected upon the ground that the agreement was void, as being in restraint of trade. The litigation only affects the Merz plant. The other three plants are being operated to their fullest capacity, and are now doing a good business."

The Merz Capsule Co. states that "As a Michigan corporation, we are not allowed, under the laws of this State, to hold stock in another corporation, and when advised of this fact we requested the United States Capsule Co. to allow us to withdraw from our agreement. This request was not only refused, but on January 22 representatives of the United States Co., without any lawful papers, attempted to take possession of our plant and forcibly removed part of our machinery, ostensibly spirited away for the purpose of preventing us filling orders and to force us into the combination. We have taken the matter into the courts, and shall fight it to the end. We have already arranged to replace the machinery which was removed, and are able to take as good care of our orders as the circumstances permit. The litigation in progress affects

only the hard empty capsule part of our business, and does not concern our soft goods or filled capsules."

### Meeting of the New York Branch of the League.

A meeting of the local branch of the Interstate Retail Druggists' League was held on February 16 at their rooms in the Mott Memorial Hall, 64 Madison avenue. The meeting was notable for the enthusiasm displayed by members, about thirty in all being present. After roll call Oscar Kress was appointed temporary secretary, Mr. Falkenreck being absent. Several matters of moment to the league were discussed and on motion of President Osmun it was decided that a suitable blank for signature be prepared in which the advantages of the new rebate plan be set forth and that each member be provided with a copy to act as canvasser in his own district. This motion was after some little discussion as to other plans unanimously adopted, each member pledging himself to work faithfully for the promotion of the objects indicated. The president was thereupon authorized to procure such blanks as speedily as possible and to provide each member with a copy. Seven new members were enrolled at this meeting.

The next meeting of the local branch will be held in the Mott Memorial Hall, 64 Madison avenue, on Friday, March 2, at 8 P.M., and a large attendance of local druggists is looked for. The hall is admirably well adapted for meetings of this kind.

### Wholesale Drug Trade Bowling Association.

The wholesale drug trade of New York City have organized a bowling association and a tournament has been arranged, the opening games of which were rolled Saturday. Parke, Davis & Co., Seabury & Johnson, Whitall, Tatum & Co., McKesson & Robbins, Dodge & Olcott, and C. G. Bacon & Co. are represented by teams, and it is expected that the games will bring together the best element of the trade and will promote good feeling generally.

The programme of the games which will be rolled on Saturday afternoons at 409 Pearl street is as follows:

February 17—Whitall, Tatum & Co. vs. Parke, Davis & Co. and Seabury & Johnson vs. Whitall, Tatum & Co.

February 24—McKesson & Robbins vs. Dodge & Olcott and C. G. Bacon & Co. vs. McKesson & Robbins.

March 3—Seabury & Johnson vs. McKesson & Robbins and Parke, Davis & Co. vs. Seabury & Johnson.

March 10—C. G. Bacon & Co. vs. Whitall, Tatum & Co. and Dodge & Olcott vs. C. G. Bacon & Co.

March 17—McKesson & Robbins vs. Parke, Davis & Co. and Dodge & Olcott vs. Parke, Davis & Co.

March 24—Seabury & Johnson vs. C. G. Bacon & Co. and Parke, Davis & Co. vs. C. G. Bacon & Co.

March 31—Dodge & Olcott vs. Whitall, Tatum & Co. and Seabury & Johnson vs. Dodge & Olcott.

April 7—Whitall, Tatum & Co. vs. McKesson & Robbins.

Games commence at 3.15 P.M.

The officers of the association are G. S. Mariager, president; T. M. Mannion, with W., T. & Co., secretary and treasurer, and W. W. Tamlyn, statistical secretary.

### Random Notes of a Rambling Journey.—VII.

TAMPA AND KEY WEST.

The southern shores of Florida are only distant some two or three hundred miles from Cuba and the islands of the West Indies, being separated from the latter by the blue waters of the Gulf of Mexico and Straits of Florida. Naturalists tell us, however, that this comparatively short stretch of water is sufficient to leave South Florida distinct in biological characteristics from Cuba and the other islands of the Antilles. They seem to be agreed that Florida belongs to the Eastern division of the Nearctic Southern coast and is essentially North American. All of which I found a little difficult to understand when confronted in Tampa on December 22, 1893 (and later in Key West), with many of the evidences of a truly tropical climate. On the day mentioned, when people in the North were protecting themselves as best they could against the chilling inroads of the frost laden breezes, we stood on the Esplanade or plaza of that magnificent monument to the enterprise of H. B. Plant—the Tampa Bay Hotel—overlooking a wealth of semi-tropical verdure consisting of palms, cycades, tamarinds, olive, cacti, wild fig, mango and guava, not to mention many other tropical and semi-tropical trees and shrubs whose enumeration in these notes would scarcely be permissible, so extensive is the list. The air was hot to the verge of sultriness, though the atmosphere was clear and bright and the thermometer marked but 80° in the shade. Glancing skyward one could see the great black bodies of a flock of buzzards as they wheeled lazily in circles overhead; scarcely a breath of air stirred, the whole scene being eloquent of the enervation which seems to be an accompaniment of life in Southern latitudes.

The majority of the people hereabouts are of a hardy Northern stock, however, and do not allow themselves to be easily overcome with the torpor of their climatic environment. I found the principal pharmacist of the town to be a New Hampshire man who counts many of his friends among the drug trade of both Concord and New York; he will also be remembered by many of the trade in Milwaukee, Wis., as he conducted a successful pharmacy in that place for a number of years. This is Isaac N. Morton, proprietor of "Morton's Drug Store" in Tampa for upward of three years, who like his equally prominent rivals in business, S. B. Leonardi & Co., does a general business in drugs, surgeon's and oculist's supplies, newspapers, books, magazines, etc.

The condition of pharmacy in Tampa is good at the present time, every indication pointing to the existence of excellent relations between the physicians and pharmacists of the town, and no cutting appears to be practiced. Port Tampa, from which we took steamer to Key West, is the southern deep water terminus of the Plant System, which with the rapid development of trade with South America and the West India islands has become a center of great activity. A hotel known as "The Inn" under the same management as the Tampa Bay Hotel has been built on a pier over the water about a mile from the shore. It is a most picturesque-looking building of the Queen Anne cottage style of architecture, in the construction of which every convenience looking to the comfort of guests has been utilized.

Leaving Tampa about 10 o'clock in the evening, Key West is reached next day about noon, and what a scene is that which is presented to the view of travelers as the steamer nears this veritable gem of the Gulf! Under a cloudless sky of blue whose intense depths of azure found ready reflection in the milky blue waters of the gulf we sailed slowly into port. The island, with its irregular markings of clear white, blue, red and yellow softened by distance, presented a scene of picturesque beauty difficult of comparison and still more difficult to forget.

The trip over was made on the S. S. Mascotte, of the Plant Line commanded by Captain Hanlon, and proved a very pleasant experience. Captain Hanlon's boat is the smallest of the fleet and by many considered the most comfortable; but the entire service of the system with which H. B. Plant's name is connected is well designed for the comforts of travelers and deserving of the highest praise.

Key West is the capital of Monroe County, Florida, and derives its name from *Cayo Hueso*, Spanish for bone key. On the north its beach is lapped by the opaque blue waves of the Gulf, while its coasts to the east and south look out on the Straits of Florida, the waters of which present a peculiarly milky blue appearance from the suspended particles of coral rock, disintegrated by the storms which rage with periodical violence around the island.

The arrival of the steamer at Key West is always an event of interest to the people of the island, peddlers, hackmen and others of that class depending almost solely on the tri-weekly visits of the boats for means of subsistence. What seem to be a perennial source of profit and amusement to passengers and others are the feats of diving performed by boys in the water close to the wharf. Diving for small coin is the game, and on the day we landed business was good. The rapidity with which these urchins dived and intercepted a nickel half way to the bottom, never failed to elicit expressions of surprise from the passengers. The most fun is furnished when two boys happen to dive for the same nickel and grapple with each other a few feet from the surface.

A note on a visit to a Key West cigar factory and an account of the sponge fishing industry of the island are reserved for a future letter.

THOMAS J. KEENAN.

### Fire at Farrand, Williams & Clarke's.

Detroit can make claim to having had more large drug fires than any other city in the United States. In 1882 James E. Davis & Co., after having been in business only six months, were visited by the fire fiend and suffered a 50 per cent. loss on a stock of \$70,000; again in 1891 this same firm were the victims, sustaining a total loss, their stock amounting to upward of \$175,000.

In January of this year T. H. Hinchman & Sons were burnt to the ground, suffering a loss of \$90,000, and on the morning of Feb. 15 Farrand, Williams & Clarke were burnt to the ground, suffering a total loss, amounting to \$170,000.

Very fortunately for the retail drug trade of Detroit and neighborhood the firm of Williams, Davis, Brooks & Co. have but recently moved into their beautiful new establishment, and with their immense new stock of goods, amounting to upward of \$350,000, have been able to place at the disposal of their unfortunate competitors their stock, thus enabling them to take

good care of their customers with almost their usual promptness.

Farrand, Williams & Clarke, with the usual promptness, energy and enterprise of the western merchant, began at an early hour on the same day as their fire to telegraph to the various concerns from whom they purchase their supplies for a new and complete stock, and they hope by the time the goods come in, which will be within a week, to have their new quarters ready to receive the same. They will occupy the building formerly used by Williams, Davis, Brooks & Co., which is located at 11 to 17 Larned street, the main building being 110 x 80 and five stories high, the annex 60 x 80 and two stories high, both with basement. This building has been in the course of preparation for their moving in for some little time back, and when they have become settled in it with their new stock they will be one of the best equipped wholesale drug establishments in the West. This concern has received a very large number of telegrams and letters of sympathy from all over the country from their friends, and offers of all sorts of assistance from the local trade. Let us hope that the black cloud which has come may be found to have its silver lining for them.

## Obituary.

DR. THEODORE BILLROTH.

Theodore Billroth, one of the most eminent surgeons of this century, was born at Bergen, on the island of Rügen, on April 26, 1829, and died on February 6, 1894. He studied medicine at the Universities of Greifswald, Göttingen, Berlin, and Vienna; in 1855 he became Dr. Langenbeck's assistant at the University Clinic of Berlin, and began to lecture in the following year. In 1859 he accepted a professorship at the University of Zurich, which he left in 1867 for Vienna, where he has remained ever since, as one of the chief ornaments of the medical faculty. During the Franco-German war he was one of the leading surgeons in the hospitals along the Rhine. Dr. Billroth's original researches affected many branches of medical science, notably histology, general pathology, and improvements in war surgery and hospital management. Among his best-known treatises are those entitled "Surgical Letters from the Field Hospitals at Weissenburg and Mannheim," "On the Transportation of the Wounded," "On the Learning and Teaching of Medicine at German Universities," "Surgical Clinique," "Handbook of General and Special Surgery," and many others. He has also been since 1861 one of the editors of Langenbeck's *Archiv für Klinische Chirurgie*. Dr. Billroth has also exerted much influence on medical progress indirectly through his pupils. One of his most sensational operations was the first successful extirpation of cancer of the stomach.

GEORGE E. SHIELS.

George E. Shiels, one of the oldest and best known druggists in this city, died at his home, No. 53 East Twelfth street, on Sunday morning, February 18, of heart disease. He was born in the city of Merida, Yucatan, Mexico, April 23, 1826. He was graduated from the College of Pharmacy in 1851. In 1853 he established his own store in what was then uptown New York, on the corner of Sixth avenue and Twenty-third street. Here he remained until the buildings there were demolished to make room for Booth's

Theater. Moving then to 896 Broadway he remained there until that building was demolished. His last move was to No. 821 Broadway, in 1886. During the 42 years that he was in business, up to a few weeks before his death, he never missed a day from his store. Two sons and a widow survive him.

Edmund A. Crenshaw, Sr., of the Philadelphia wholesale drug house of Bullock & Crenshaw, died on Monday, aged about 70 years. This is one of the oldest drug houses in the trade and many of its former employees are now heads of other firms. Mr. Crenshaw and his partner were the first to introduce sugar-coated pills, but it was not long before they had many followers. During the war this house received most of the contracts for furnishing medical supplies to the army and navy, and this fact not only brought the firm into great prominence, but also added prosperity. In recent years Messrs. Bullock & Crenshaw have been devoting most of their attention to specialties.

### Boards and Colleges.

THE LOUISIANA BOARD OF PHARMACY met at the office of the secretary, Walter T. Taylor, at N. Ranyar and Clout streets, New Orleans, on Friday, February 9. The following applications for registration as registered pharmacists were favorably considered, and certificates as such were ordered issued to each: C. Goodwill, Monroe and Emile Helman, C. D. Sauvinet, A. B. Schmitt, Simon Verburg, E. H. Walsdorf, J. S. J. Otto and A. C. Freitag, of New Orleans.

The applications of Robt. Jackson, of New Orleans, Jas. C. Armitage, of Burnside, and F. W. Smylie, of Centreville, were held back for additional information. J. W. Lea, of Jackson, was refused registration. The following candidates for examination were ordered to appear before the committee on examination on Saturday the 10th inst., for qualified assistant's certificates: E. F. Bacon, C. E. Krunch, C. A. Lopez, G. Charbonnet and C. G. Magruder. For registered pharmacist's certificates: B. F. Holmes, W. J. Hosea, C. G. Magruder, A. Javelet, W. R. McHenry, F. R. Burton, R. E. Robinson and H. J. Fournet.

After transaction of further routine business the board adjourned to meet on call of the president during first week of May.

SCHOOL OF PHARMACY OF NORTHWESTERN UNIVERSITY.—The spring and summer term began on the first of February with a class of 135 students. The winter class graduated February 6, the exercises being at the Auditorium Hall, Chicago. Prof. Quine delivered the address. One of the graduates, Rudolph S. Steensen, presented to the library of the school on behalf of his father, Dr. J. Steensen, of Sioux Falls, S. Dak., a set of Nees von Esenbeck's *Plates of Medicinal Plants*, a rare and valuable work published in 1812. J. Frank Post, the spokesman of the graduating class, discussed compulsory pharmaceutical education in a clear and interesting way. The University medal was awarded to Leopold Simon, of San Antonio, Texas, and the junior prize to M. H. Webb, of Bryan, Texas. Honors were also awarded to David F. Jones, of Portland, Wis.; John H. Look, of Sheboygan, Wis.; J. Frank M. Post, of Murphysboro, Ill.; Frank B. Wynkoop, of Wauconda, Ill., and E. Roy Lovett, of Galion, Ohio.

The graduates were: James Adams, Le Mars, Iowa; William L. Becker, Dubuque, Iowa; John Broadwater, Memphis

Mo.; Stafford Campbell, El Paso, Tex.; A. Burton Clevidence, Mt. Morris, Ill.; John C. Conibear, Morton, Ill.; Thomas M. Cross, Decatur, Ala.; Fred E. Curtis, Metropolis, Ill.; William F. Eggert, Chicago; Robert R. Enlow, Bloomington, Ill.; Elmer Ewing, Bluffton, Ohio; Herbert L. Fulton, Chicago; Harry E. Gardner, Vermont, Ill.; Charles E. Giese, Milwaukee, Wis.; Fred. W. Gregg, Cherokee, Iowa; Charles P. Guenther, Freeport, Ill.; Frederick C. Hartshorn, Pontiac, Ill.; Lewis O. Hieber, Cedar Falls, Iowa; Herman B. Jaehnig, Red Wing, Minn.; Theodore Kaiser, Ottumwa, Iowa; Charles H. Law, Menominee, Mich.; Harvey Lichtenwalner, Monroe, Wis.; Henry E. Lindblade, Rockford, Ill.; John H. Look, Sheboygan, Wis.; Otto G. Luehrs, Cherokee, Iowa; Julius A. Lyon, Chicago; Edward G. Marsh, Bowen, Ill.; James H. Miller, Ney, Ohio; William C. Morgan, Omamee, Ont., Can.; Howard L. Norris, La Grange, Ind.; Harry O. Patterson, Griswold, Iowa; William M. Pfennig, Janesville, Wis.; Bert R. Phillips, Rushville, Ill.; J. Frank H. Post, Murphysboro, Ill.; Arthur Price, Elizabethtown, Ill.; Benjamin O. Price, Big Rock, Ill.; George S. Roberts, Fox Lake, Wis.; Edward F. Rossman, Greenwood, Wis.; Humphrey H. Sherwood, Shabbona, Ill.; Leopold Simon, San Antonio, Tex.; Herbert M. Snider, Peoria, Ill.; Rudolph S. Steensen, Sioux Falls, S. Dak.; Leo Steinberg, Lebanon, Mo.; Dillon Swingle, Athens, Ill.; Frank S. Tarbill, Sparland, Ill.; Egbert W. Van Delden, Lyons, Iowa.

### Western Notes.

Morrison, Plummer & Co., of Chicago, have added to their large establishment the building adjoining the one now occupied, formerly occupied by Gerts, Lombard & Co., brush manufacturers, which covers a space of 80 by 165 feet, and will be used entirely for their sundry department. This department has been in charge of T. C. Ballard, and through his efficient management its growth has been almost phenomenal. Mr. Ballard has been connected with Morrison, Plummer & Co. for the past six years and is known from coast to coast as one of the best friends of the traveling man. This firm well deserves the success that has come to them, as every one of the firm is a hard worker and at his place of duty early and late. The courtesy extended to every caller is a large factor in their popularity.

C. H. Bayard, western representative of Calvin Shafer & Co., 86 Cortlandt street, N. Y., the oldest manufacturer of fruit juices for soda water syrups in this country, was met by your representative in Chicago last week, and he reports the outlook for business in his line the best for years. Mr. Bayard is one of the best known traveling men in the country, having been with this one concern 14 years, and his fund of interesting stories has kept many a blue traveler, during the dull times just past, from giving up.

White & White, retail druggists of Grand Rapids, have a wagon the back part of which is made in the shape of a mortar and pestle. This opens so that packages can be put in.

Dr. Nelson Abbott, formerly of Lima, Ind., has purchased the drug store of N. E. Leighton, of Kalamazoo.

The manager of the H. T. Clark Drug Co., Lincoln, Neb., fell and broke his arm recently.

## NOTES ON PRICES.

### FRESH ADVANCE IN MORPHINE.

Rosengarten & Sons and Powers & Weightman, manufacturing chemists, Philadelphia, announce in circulars under date of February 19 that they have from that date advanced the price for acetate, muriate and sulphate of morphine, by 25 ounces or more, to \$2.50 per ounce, including  $\frac{1}{4}$  oz. vials in 1 oz. boxes. \$2.45 per ounce, including  $\frac{1}{4}$  oz. vials in  $\frac{1}{2}$  oz. boxes. \$2.35 per ounce, including 1 oz. vials. \$2.20 per ounce, in bulk.

### WHOLESALE DRUGGISTS' PRICES.

The volume of business for the past two or three weeks still continues of encouraging proportions, indicating a good general business among retail druggists. Orders are being received in fair amount for gripe remedies, the demand for these goods being apparently in excess of the usual average.

We note below the important changes which have taken place during the past month in the prices at which retailers usually purchase goods in ordinary lots.

ASAFCETIDA has advanced to 30 @ 35c. for whole and 45 @ 50c. for powdered gum.

BERRIES—Cubeb, powdered, has declined to 35 @ 40c.; Juniper, ground, is lower at 15 @ 18c.; Prickly Ash, have also declined, 35 @ 40c. being now obtainable.

CARBON DISULPHIDE is lower, 15 @ 20c. being current figures.

CHLORAL HYDRATE has advanced to \$1.45 @ \$1.85.

CLOVE has declined, and is now quoted 12 @ 14c.

COCAINE MURIATE, cryst., has advanced in the interval, and the range now stands \$6.24 @ \$6.45.

GUAIACOL is reported dull at 75c., being a decline of 10c.

GUMS—Opium has advanced materially in the interval, and is now quoted \$3 @ \$3.25, powdered being higher in sympathy at \$3.75 @ \$4.

MORPHINE has also advanced; we quote the range \$2.35 @ \$2.50.

OILS—Cubeb has declined and is now to be had at \$2.25 @ \$2.50; Peppermint of the different grades is higher, New York State and Western being held at \$2.75 @ \$3. and HGH \$3.25 @ \$3.50; Redistilled is quoted \$3.25 @ \$3.50; Wormwood is lower at \$3.50 @ \$4.

PIPERAZINE is lower, being now quoted \$2.75 for ounces and \$1 for tubes.

QUININE has marked a further advance and is firm at 25 @ 32 $\frac{1}{2}$ c. for bulk. Ounces offer at 32 @ 39 $\frac{1}{2}$ c.; bi-sulphate is also higher at 34 $\frac{1}{2}$ c.

ROCHELLE SALTS has declined to 21 @ 23c.

SOMATOSE is an addition to the list and quoted \$5.50 per lb. in eighths.

## Review of the Wholesale Market.

NEW YORK, February 21, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The trade in drugs, dyestuffs and chemicals during the week has been of a fairly animated condition, though no new features of importance have developed. In small lots there is a continued fair movement, but speculative interest in original packages is still lacking, and the market in consequence bears a comparatively tame appearance. Taken as a whole, however, the market continues firm in

tone, prices being maintained upon a generally steady basis. About the usual number of price changes have occurred. Cascarilla bark is higher, and the same may be said of gum kino, kola nuts, coca leaves, gambier, codeine. Declines are noted in the following: Lithia preparations, menthol, small flake manna, celery seed, naphthaline, salol, Japan wax. Opium is unsettled.

### DRUGS.

ALCOHOL shows no further change from the advance noted in recent issues, the trust taking orders at \$2.24 @ \$2.28 as to quantity for grain. Wood is unchanged.

BALSAM COPAIBA continues scarce, the small available supply being closely concentrated in first hands. The *Daisy C. Parkhurst* from Ciudad Bolivar to arrive has six boxes. For the small lot of Para now in first hands 35c. is asked, but business at this range is limited, buyers looking for lower figures.

BALSAM FIR has remained quiet at the previous range of \$3.75 @ \$4 for Canada; Oregon is passing out in moderate jobbing quantities at 80 @ 85c.

BALSAM TOLU is held at 25 @ 27c. with, however, a limited demand at the moment.

BARKS of the various kinds are jobbing fairly. Cascarilla Sagrada continues to find purchasers at 5 $\frac{1}{2}$  @ 6c. with 5c. quoted for goods on the way. Cascarilla has been advanced to 5 $\frac{1}{2}$ c. for sifted with some considerable sales said to have been made for shipment abroad. Ordinary quality to arrive offered at 4 $\frac{1}{2}$ c. Soap is firmer with the indication favorable for improved values in the near future; prices, however, are without quotable change. The range of the market is 3 $\frac{1}{2}$  @ 4 $\frac{1}{2}$ c.

BUCHU LEAVES, short, continue in steady, moderate request for all grades running from common to prime and the prices realized 10 @ 12c. as to quality. The leaves are reported as in better position with the cost of prime green to import full 9c.

CACAO BUTTER, Dutch, is almost out of market, but supplies are expected shortly by the *Etruria*. The nominal price is 32 @ 32 $\frac{1}{2}$ c.

CIVET is scarce and prices are slightly higher, \$5 @ \$6 being generally required.

COCAINE MURIATE continues firm at the recent advance and a moderate trade is reported at the current range of \$5.50 @ \$5.90 as to quantity.

COD LIVER OIL, Norwegian, has been in fair request during the week and we note among other transactions a sale of 20 bbls. at \$19.50.

CODEINE is firm at the recent advance and sales are making at the improvement, say upon the basis of \$4.25 for bulk alkaloid in a quantity way.

DOG GRASS has attracted some attention during the interval and we are reported a sale of 500 lbs. at 5c.

ERGOT is meeting with considerable inquiry, but business is somewhat restricted as holders are disinclined to meet the views of buyers. German and Russian are quoted 24 @ 28c. and Spanish 28 @ 30c. as to quality and quantity.

JABORANDI LEAVES continue held at 25 @ 35c. with prospects of an early decline, a considerable parcel being in transit and offering at 20c. to arrive.

JUNIPER BERRIES continue to meet with fair moderate inquiry at the quoted range of 2 $\frac{1}{2}$  @ 3c. Among other transactions we are reported a sale of 500 bags on private terms.

KOLA NUTS are now offering to arrive at 18c.

MENTHOL is quiet with the tendency of the market easy. Ordinary Japanese to arrive quoted \$5.



MORPHINE is somewhat scarce and a premium is in some instances exacted; for the small available stock of P. & W. As noted above both P. & W. and R. & S. have advanced their prices to \$2.50 in eighths.

NAPHTHALINE has declined here to 4c. for ball and 3 @ 3½c. for flake. The price for forward shipment being 3½c. for balls.

OPIUM in this market appears to be in strong statistical position, the article having reacted from the bearish influence of a number of operators who attempted unsuccessfully during the week to break prices. A number of large sales are reported of high test stock, about 200 cases in all representing the aggregate distribution. The lowest open price now named for single cases is \$3, and the market is now quoted firm at this price. Cables from primary sources are of a very strong character, those from Constantinople advising 11s. 6d, with the stock rapidly being diminished; while Smyrna reports 11s. 6d. The information is also furnished that fully 80 per cent. of the fall sowings are a total loss, though the trade here are rather skeptical of this latter statement. The jobbing price is about on a par with the case value. Powdered has been advanced to \$3.70 @ \$3.95.

QUININE has quieted down to some extent, but continues in steady fair inquiry with a further appreciation in prices looked for. Foreign in second hands is passing out at 23¼ @ 24c. though manufacturers' prices continue firm at 25c. for foreign and 27½c. for domestic.

SALOL is reported to have declined materially at primary sources, the equivalent here of German makers' prices now standing at \$2. The previous quotation of \$3.85 is regular here as the article is patented in the United States. It is doubtful, however, whether this price can be maintained in face of the lower cost at primary sources.

SENNA, Tinnivelly, continues to meet with moderate inquiry and we are reported jobbing sales at 6 @ 18c. as to quality. Natural Alexandria is well sustained at 18 @ 25c.

SOAP, Cont's white, is easier owing to the increased quantity available; purchases can be made at 9½ @ 9¾c.

TONCA BEANS, Angostura, are in better demand and with a small available supply. The tone of the market is stronger. We quote \$1.85 @ \$2.

VANILLA BEANS, cut, are firm with a moderate distribution reported at the range of \$5 @ \$5.50; whole are quoted \$6.50 @ \$13.

#### DYESTUFFS.

CUTCH is without important change. Jobbing sales are making at 5¼ @ 6c. for prime grades. SM 5¼ @ 5½c. and 5¼ @ 5½c. for HT.

DIVI DIVI is reported in fair inquiry, and selling in a moderate way at 55 @ 65c.

GAMBIER is in improved statistical position with 4¼c. quoted as an inside value for store goods in a quantity way, and for jobbing parcels up to 5c. is wanted.

NUTGALLS, Blue Aleppo, are well maintained at 13¼ @ 14½c. as to quantity, with numerous sales within this range.

SUMAC, Sicily, is held and selling in a small way at \$72.50 @ \$77.50.

#### CHEMICALS.

ALUM continues steady and in request with sales of lump at \$1.70 @ \$1.75 and ground \$1.75 @ \$1.80.

ARSENIC, White, continues in fair inquiry with current sales at 3½ @ 3¾c. as to brand.

BLEACHING POWDER is in limited demand at the moment, but the supply is light and the market firm at \$2.25 for German and \$2.50 for English. Blue Vitriol meets with moderate sale and the price is maintained at 3½ @ 3¾c.

BRIMSTONE, crude seconds, is dull and easy with parcels to arrive quoted \$18 and forward shipment \$17 @ \$17.50.

CAUSTIC SODA is without important change, but is under better control and tending firmer. Sales are making to consumers of 70 and 74 per cent. at \$2.50 @ \$2.65.

CHLORATE OF POTASH is quiet with prices nominally unchanged. German crystals quoted at 14 @ 14½c. and English at 14½ @ 14¾c.

CITRIC ACID is dull and easy, with kegs offering from second hands at 42½c.

CREAM TARTAR is quiet, though no quotable change in price is reported, crystals held at 17½, and powdered at 17½ @ 18c.

NITRATE OF SODA is maintained firmly, and moderate sales are reported at the range of \$1.92½ @ \$2.

OXALIC ACID is in moderate request and firm. The sales are at 6¼ @ 7c. for German and 7 @ 7½c. for English.

QUICKSILVER is unchanged from 45c. @ 46c.; only jobbing sales are making.

#### ESSENTIAL OILS.

ANISE develops no action of any consequence, purchases in most instances not exceeding jobbing quantities. The quotation remains \$1.42½ @ \$1.45.

BERGAMOT is steady and quoted at \$1.75 @ \$2.40.

CASSIA yet offers at 80 @ 85c. without, however, exciting any interest of a speculative character.

CLOVE is readily obtainable at 50 @ 53c., but the trade requirements are light.

CUBEB continues dull, but the market does not vary from \$1.50 @ \$1.70.

PENNYROYAL remains quiet, without, however, any quotable change in price. Prime grades, domestic, held at 90c. to \$1.

PEPPERMINT continues inactive, the article being momentarily neglected. HGH is very dull, export demand being entirely absent. The general asking price is \$2.80 @ \$2.85, though in exceptional instances \$2.77½ can be done. Bulk is unchanged, the range upon Western and State oil being \$2.45 @ \$2.60.

SASSAFRAS is without important change; pure held at 36 @ 40c.

WINTERGREEN is jobbing at \$1.40 @ \$1.50, this quotation being for pure; artificial is held at 80 @ 87½c.

#### GUMS.

ARABIC, sorts, have been actively inquired for and we hear of a sale of 50 bags at 10c. The market appears stronger in tone with 10 @ 11c. representing the range.

ASAFOETIDA is quite actively inquired for, all grades participating in the interest extended. We hear of numerous sales in a jobbing way at the range of 15 @ 30c. Prime grades are in small supply and late advices from the London market advise an appreciation in value. Prices here have advanced in sympathy and 20 @ 30c. now represent the range.

BENZOLIN has been in moderate inquiry during the week with numerous jobbing sales at 40 @ 47c. as to quality.

CAMPOR is dull and easy, though not quotably lower. Domestic in a large way may be obtained at 44c. and 45c. for bbls. and cases, but for jobbing parcels 45c. and 46c. are quoted respectively.

CHICLE does not attract increased attention. The stock in this market is large but does not offer below 27 @ 28c., hence there is no great pressure to realize.

KINO is well maintained at the recent advance to \$1. The stock is small and concentrated.

MASTIC is in moderate demand with supplies held at 57 @ 70c. as to quality.

SENEGAL has been inquired for and we are reported among other transactions, sales of 15 cases on private terms.

SHELLAC is in moderate jobbing demand and firm upon the basis of 25 @ 27½c. for TM quality. Speculation is momentarily suspended however. The indications are for a higher market.

TRACACANTH has sold to some extent in the interval but the range is steady at 32 @ 36c. as to quality.

#### ROOTS.

ALKANET continues to offer at 6 @ 7c.

ALTHEA, cut, is firm at 18 @ 20c.

DANDELION is maintained at 7½ @ 8c. with moderate jobbing sales.

GALANGAL is held at 3¼ @ 4c., but inquiry at the moment is rather limited.

GENTIAN does not change from 3¼ @ 4c. with only a moderate demand making.

GINGER, new crop Jamaica, unbleached arriving, is held at the range of 12 @ 16c. as to quality.

GINSENG is maintained at \$2.50 @ \$3.60.

GOLDEN SEAL meets with a very moderate sale; the quotation, however, remains 22½ @ 23c.

IPECAC is inquired for to a moderate extent with jobbing sales making from \$1.35 @ \$1.40 as to quality.

JALAP continues dull at the range of 23 @ 27c. as to quality.

SARSAPARILLA, Mexican, is inquired for and in small parcels stock is going out at 9½c.

SENGA is quite actively inquired for with sales and re-sales aggregating 6,000 lbs., the greater portion being taken for export at 38 @ 40c.

SNAKE, Texas, continues to offer at 30c., though the demand does not increase to any appreciable extent.

#### SEEDS.

ANISE, Italian, sifted, has continued in request with further sales for export at 10 @ 10½c.

CANARY, Smyrna, is held at 2¼c. as an inside figure for prime quality and sales to a moderate extent are making at this price.

CELERY is yet obtainable at 15c., though no special inquiry is reported.

CARAWAY, Dutch, is quiet though firm at 7c.

FENUGREEK is maintained at 3c. with sales to a moderate extent at this figure.

CORRANDER, unbleached, has sold to the extent of 12,000 lbs. on private terms. The quotation of the market is 5¼ @ 6c.

HEMP, Russian, in a jobbing way realizes 2¼ @ 3¼c.

MUSTARD, California yellow, has sold freely in the interval. The general asking price for jobbing quantities is 3¼ @ 4c.

RAPE, English, is very scarce and quoted nominally 3¼c. German is quiet at 2¼ @ 2½c.

#### Cincinnati Items.

Wilmot J. Hall is laid up with the gout at the Grand Hotel.

John C. Fratz, the West End druggist, died last week from la grippe.

R. Weatherhead, the downtown druggist, is suffering with a very bad cold.

A. Bell, formerly of the firm of Gray & Bell, is now representing Woodbury's facial soap.

Otto Stephan, formerly with Groenland Bros., will hereafter manage the drug store owned by his father.



# American Druggist and Pharmaceutical Record.

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Liberal Commissions to Club Agents.

#### Finds it Interesting.

I find the queries and answers column of THE DRUGGIST AND RECORD quite interesting. The information given there strikes a pharmacist where he lives.—W. H. Dent, M.D., Reg. Ph., New Paris, O.

IN a case brought by the State Pharmacy Board of Pennsylvania recently to restrain a physician from practicing pharmacy, the judge is reported to have criticised the Pharmacy Act of Pennsylvania very severely, declaring the act unconstitutional because it was framed for druggists only! The absurdity of such a deliverance is too evident for discussion. Does the learned judge wish the law framed in the interests of physicians only?

A WESTERN subscriber who buys in original packages says that his local jobber claims that he has to pay in New York City exactly the prices quoted in our market report. Our subscriber wishes to know whether he should add freight from New York in comparing his local jobbers' prices with those quoted in our columns. The jobber unwittingly and quite likely unwillingly pays us a sincere compliment. Allowance should be made for freight to the interior, as the jobber must pay the prices given in our market report for goods f.o.b. New York.

#### THE TELEPHONE MONOPOLY.

THE telephone company operating New York City was making in 1887 at the old rate of one hundred and fifty dollars per year, a net profit of over one hundred and forty-five per cent. on the cash capital invested. Not content with this they advanced the rate to two hundred and forty dollars per annum for the new service and are endeavoring to force every one to take this service. In Brooklyn the telephone company made a net profit of over fifty-six per cent. per annum on the cash capital invested from 1882 to 1886 on a charge of sixty to ninety dollars per annum. They now charge for the new service one hundred and fifty dollars per annum.

This bears with particular severity upon physicians and pharmacists, and to the credit of the pharmacists of Brooklyn be it said they at least do not propose to quietly submit to the impositions of this oppressive monopoly.

The agitation set in motion by the letter of Mr. FRANCE to the Kings County Society, published in our columns last week, is gaining in force and volume and bids fair to meet with positive results.

There was introduced in the State Legislature on February 22, a bill drafted by the New York Board of Trade and Transportation under the title of "An act to regulate telephone charges in the State of New York and to empower certain State officers to revise and regulate the same."

The main features of this bill are as follows:

Section I provides that at the expiration of six months after the passage of the act, the charge for the annual or monthly use of a telephone, including all charges for night and day service, shall not exceed \$78 per annum in cities of 1,000,000 or more inhabitants; \$66 in cities of 500,000 to 1,000,000; \$48 in cities of 100,000 to 500,000; \$36 in cities of 20,000 to 100,000; \$30 in cities of 8,000 to 20,000, and \$27 in places of less than 8,000.

Section II provides that the charge at local pay stations shall not exceed ten cents for the first five minutes, and five cents for each additional five minutes; that no yearly or monthly patron or subscriber, having and paying for a telephone at his own place, office or residence, shall be charged for the use of a telephone at any public or pay station when used by him or his employees for the purpose of communicating with his own place, office

or residence, and that subscribers shall be furnished with identification cards.

Section III provides that if any corporation claims that the figures set are not remunerative the State officers shall investigate the business of that corporation and shall, on the basis of that examination, fix a rate that will yield a profit of 10 per cent. per annum on the actual cash invested.

The remainder of the bill has to do with details of its administration.

It will be observed that this reduces the charges in New York City from two hundred and forty dollars to seventy-eight dollars per annum, a difference of one hundred and sixty-two dollars, while in Brooklyn the reduction would be eighty-four dollars per annum.

One of the principal grievances of pharmacists and physicians is that the telephone companies object to persons other than the pharmacist or his assistant using a private telephone for the purpose of calling a physician. This is not touched directly by the bill nor does it seem feasible to make this the subject of legislation. With a sufficiently general and aggressive organization druggists might be able to force this concession from the telephone companies direct, but it could scarcely be done through legislation.

Each individual pharmacist has a remedy practically in his own hands if he chooses to apply it. This is for the pharmacist not to permit his customers to use the telephone themselves but for the pharmacist or his assistant to take and transmit the message. By doing this the pharmacist is within the letter of his contract, and would, we feel confident, have a standing in court.

He could argue that the calling of the physician for his customer was a very essential part of his (the pharmacist's) own private business. So long as the customer himself was not given the use of the telephone the pharmacist would be upheld.

The bill above referred to is carefully constructed; is fair, for the basis of charges has been carefully formulated, and should meet with the hearty and active support of every pharmacist in the State. Do not delay action, but let each pharmacist write an individual letter to the Assemblyman and the Senator from his own district and insist upon his supporting this measure.

This is practical patriotism.

## Colors from Coal Tar.

Writing about that marvelous color producer, coal-tar, a magazine writer reminds us that it is only thirty-six years ago that Perkin "gathered up the fragments" in coal-tar and produced the beautiful mauve dye. Now, from the greasy material which was considered useless is produced madder, which makes coal-tar worth \$500 a ton. This coloring matter now employs an industry of ten million dollars per annum. One ton of good cannel coal when distilled in gas retorts leaves twelve gallons of coal-tar from which is produced a pound of benzine, a pound of toluene, a pound and a half of phenol, six pounds of naphthalene, a small quantity of xylene and half a pound of anthracene for dyeing purposes. According to Roscoe there are sixteen distinct yellow colors, twelve orange, thirty red, fifteen blue, seven green, and nine violet, besides a number of browns and an infinite number of blendings of all shades.

## The Treatment of Cholera.

The following preparation has been used by me with great success in the beginning of cholera where there is profuse vomiting and diarrhoea. The same preparation has been highly recommended by Professor Botkin of Russia, and it is very extensively used by the Russian physicians. This preparation goes under the name of Guttae Botkina.

Tr. chinae comp.	.....	ss 1.50
Anodyn. Hoffmanni	.....	
Acid mur. dil.	.....	2.5
Ol. menthae pip.	.....	0.3
Chinini murati.	.....	2.0

M. Sig.: Twenty drops three or four times a day during cholera.

In cholera infantum I use this preparation in divided doses and a larger proportion according to the age or in the following manner which gives excellent results:

Acid mur. dil.	.....	2.0
Liquor anod. Hoffmanni	.....	6.0
Bismuth salicyl.	.....	6.0
Acid carbol. (C. P.)	.....	0.12
Glycerin	.....	12.0
Aqu. menthae pip.	.....	ad 60.0

M. Sig.: A teaspoonful every hour, according to age.

For choleraic diarrhoea, the following preparation is also good:

Tr. opii	.....	4.0
Essentia menthae	.....	ss 8.0
Liquor anod. Hoffmanni	.....	

M. Sig.: Twenty drops four or five times a day.—H. ROSAHNSKY, M.D., in *Med. Record*.

## The Hypodermic Injection of the Salts of Quinine.

In *L'Union Médicale* (*Ther. Gazette*) there is an interesting article upon the hypodermic injection of quinine, in which the following solubilities of the various salts are given:

One part of neutral hydrochlorate is soluble in .66 of water; neutral sulphovinate, .70; neutral lactate, 2.00; basic sulphovinate, 3.80; neutral hydrobromate, 6.33; neutral sulphate, 9.00; basic lactate, 10.29; basic hydrochlorate, 21.40; basic hydrobromate, 45.02; basic sulphate, 581.

The neutral hydrochlorate is by far the most soluble of the salts of quinine for hypodermic use, and is, in addition, rich in alkaloid. The sulphovinate is also very soluble, but is not so advantageous. It has been found that the addition of antipyrin aids in the solubility of the quinine. As is well known, the hypodermic injection of quinine forms an important part of the treatment of cases of severe malarial poisoning.

## Treatment of Poisoning by Chloral Hydrate.

1. Avoid all disturbance of the stomach by attempts to evacuate it; and specially avoid emetic remedies, since nothing depresses so much and assists in reducing animal temperature as vomiting.

2. Place the body at once in a warm atmosphere; keep the body itself very warm, but of all things see that a warm atmosphere is inspired. The air to be breathed should be raised and sustained at 90 degs. Fahrenheit at least.

3. Be most careful in sustaining the body by the administration of warm food. Hot milk, to which a little lime water has been added, is the best food that can be supplied. If it is impossible to make the patient swallow, the milk is easily introduced into the stomach by the long nostril tube. It need not be thrown in rashly, but may be made to enter in a gentle current. It is good practice also to administer frequently an enema of beef tea or of milk and water as warm as it can be borne, the heat being of as great value as the food that may be absorbed.

4. A fourth point to remember is to sustain the breathing should that begin to fail. I found invariably in the lower animals, under the profound influence of chloral, that the respiration always ceased before the motion of the heart. This was so decidedly the case that in some instances, in which every sign of life had passed away, it was observed, on laying open the chest for post-mortem purposes, that the muscular walls of the cardiac cavities still showed signs of irritability. Hence the importance of gentle artificial respiration. No complicated artificial apparatus is demanded. A pair of small parlor bellows suffices. To the nozzle of such bellows attach an india rubber tube, and at the other or free end a nostril tube. Place the nostril tube in one nostril, close the other nostril by pressure, close the mouth, and by the slow action of the bellows gently inflate the chest; then remove the nostril tube for the moment, allow the chest to empty itself, and repeat. One charge of air, given at intervals of ten seconds from each other, and without the least violence, is all sufficient, since a small quantity of air is necessary to keep up the respiration as would be required if the body were in a state of catalepsy or of hybernation.

These are the practical means to be employed. Antidotes there are none, nor can we form any reasonable idea of an antidote. Recovery from chloral is a systematic process. The chloral has to be decomposed by the alkaline blood, the chloroform that is liberated in the decomposition has to be eliminated from the body by the lungs and the skin, and the formate of soda that is formed has to escape by the skin, bowels, and kidney. In proportion as these eliminations take place, under warmth and sustenance of food, safety is insured. I calculated that an adult person who has taken sufficient chloral to be narcotized by it should be able to dispose of it at the rate of seven grains per hour if favorably placed for elimination.

One detail more. It is very important all through the process to see that the bladder is kept free from distension, and to relieve it, from time to time, by the catheter, if there be no natural micturition.—SIR BENJAMIN WARD RICHARDSON.

Pill Coating.—The pills are damped with a mixture of glycerin, 1 part; alcohol, 2 parts. They are then rolled in a mixture composed of tragacanth, 2 parts; sugar, 4 parts; starch, 1 part.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Angostura Bitters.—S. R. asks for a formula for these famous bitters, and we give the choice of two formulas we have at hand:

	Extract	Bitters.	Bitters.
Angostura bark	16 oz.	10 oz.	16 oz.
Gentian	4 oz.	4 oz.	
Canada snake root	8 oz.	10 oz.	
Licorice root		10 oz.	
Calisaya bark	8 oz.	10 oz.	
Virginia snake root	8 oz.	10 oz.	
Bitter orange peel	8 oz.	16 oz.	4 oz.
Galangal root	4 oz.	4 oz.	
Calamus root	4 oz.		
Cardamom	2 oz.	6 oz.	1 oz.
Caraway		1 1/2 oz.	
Dandelion root		10 oz.	
Allspice		10 oz.	
Cinnamon	1 oz.	1 1/2 oz.	1 oz.
Cloves		3/4 oz.	Raisins
Mace	1 oz.	1 oz.	4 lb.
Nutmeg		2 oz.	
Chamomile			4 oz.
Coriander	1 oz.	2 oz.	
Dilute alcohol to make	1 gal.	50 gal.	10 gal.
Honey		25 lb.	

The extract in No. 1 formula when wanted for bitters is to be mixed as follows: Extract, 4 fl. ounces; dilute alcohol, 1 gallon; glycerin, 4 fl. ounces.

Ox-Gall Soap. S. P. R. writes: Can you give me a formula by which ox-gall soap can be made?"

The following formulas are useful for this purpose:

I. Ox gall.....10 ounces  
Borax.....1 ounce  
Soap (a good quality of laundry soap, recently made).....20 ounces  
Incorporate by fusion.

II. Recent ox-gall, strained, 4 pints, evaporate to.....1 pint  
Borax.....2 ounces  
Soap (as above).....5 pounds  
Incorporate by fusion.

Such a soap may be used for removing grease spots and the washing of flannel goods.

Saline Water, Oxygenated. C. O.—In the proceedings of the British Medical Association for 1865 Dr. Richardson gave the following formula in a paper read by him:

Potassium sulphate	.....	2 grains
Sodium chloride	.....	400 grains
Iron sulphate	.....	12 grains
Simple syrup	.....	1 ounce
Peroxide of hydrogen	.....	1 ounce
Water to make in all	.....	24 fluid ounces

Bulk of Syrup. C. M.—The following table will perhaps be of assistance:

Sugar 32 oz.	Water 24 fl. oz.	=	45 fl. oz. sp. gr. 1.273
Sugar 32 oz.	Water 20 fl. oz.	=	41 fl. oz. sp. gr. 1.298
Sugar 32 oz.	Water 16 fl. oz.	=	37 fl. oz. sp. gr. 1.330
Sugar 28 oz.	Water 16 fl. oz.	=	34 fl. oz. sp. gr. 1.311
Sugar 24 oz.	Water 16 fl. oz.	=	32 fl. oz. sp. gr. 1.200
Sugar 20 oz.	Water 16 fl. oz.	=	29 fl. oz. sp. gr. 1.264
Sugar 16 oz.	Water 16 fl. oz.	=	26 fl. oz. sp. gr. 1.231

Compound Syrup of White Pine. S. W. F.—The formula which is the subject of your note was contributed to the columns of this paper by "Galen, Jr.," and reads as follows:

Balm Gilead buds	.....	ss 5 1/2 ounces
Spikenard	.....	
Blood root	.....	
White pine	.....	20 ounces
Wild cherry	.....	40 ounces
Ipecac	.....	4 ounces
Sassafras	.....	2 1/2 ounces
Acetate morphine	.....	2 drams
Chloroform	.....	5 1/2 ounces
Alcohol, 1 part	.....	
Water, 2 parts	.....	9.2

After twelve hours' maceration of drugs

reduced to coarse powder, percolate with above menstruum to 24 pints. In this dissolve 24 pounds sugar by percolation and add  $\frac{1}{2}$  gallon confectioner's glucose. Dissolve morphine in 8 ounces of water and add sufficient acetic acid to remove turbidity. Mix with syrup, add the chloroform and agitate well; add lastly enough simple syrup to make 40 pints.

This formula is a modification of the Syrup White Pine Compound of the manufacturing pharmacist, and is a very efficient preparation. If combination with tar is thought desirable,  $\frac{1}{2}$  ounce of N. F. glycerite of tar can be added to each pint.

**Marienbad Reduction Pills.** T. L.—We give a formula which appears in a German work under the title of "Marienbader Reduktionspillen."

Potass. bromid.....	10
Sodium bicarbonat.....	30
Ext. scilla.....	30
Lign. guaiac pulv.....	40
Rad. senega pulv.....	40
Ext. taraxaci.....	q. s.

Ft. massa divi. in pill No. 0.15.

The pills are to be rolled in powdered cinnamon and dried at 70° to 80°F.; cover with silver foil.

**Mucilage for Wood and Envelopes.**—W. C. B., writes: "Please give me a formula for a paste to make paper adhere very firmly to wood and as soon as paper comes in contact with it; also a formula for envelope mucilage."

A paste composed as follows can be recommended: Four parts, by weight, of glue are allowed to soften in 15 parts of cold water for some hours, and then moderately heated until the solution becomes quite clear; 65 parts of boiling water are now added, with stirring. In another vessel 30 parts of starch paste are stirred up with 20 parts of cold water, so that a thin milky fluid is obtained without lumps. Into this the boiling glue solution is poured, with constant stirring, and the whole is kept at the boiling temperature. After cooling, 10 drops of carbolic acid are added to the paste. This paste is of extraordinary adhesive power, and may be used for wood, leather, cardboard, etc.

For envelope mucilage try the following: Gum dextrin, 2 parts; water, 5 parts; acetic acid, 1 part. Dissolve by aid of heat and add 1 part of 9 per cent. alcohol.

**Dediac.** A. R. C.—This is a preparation used by soldiers for polishing black leather articles. It is prepared as follows:

White wax.....	3 drams
Ether.....	3 fl. ounces
Logwood extract.....	4 drams
Gallic acid.....	3 drams
Tincture of iron chloride.....	1 fl. ounce
Alcohol, enough to make.....	1 pint

Dissolve the wax in the ether, allow the extract of logwood and gallic acid to macerate with occasional agitation during 24 hours, then strain through cloth and add the tincture of iron; add the mixture thus prepared to the ethereal solution of wax, and again strain through cloth.

**Root Beer Extract.**—C. E. R., Jr., writes: "Please print in your next issue a good reliable formula for preparing root beer extract similar to Hire's or Knapp's."

The following will furnish what is desired:

Sassafras.....	5 pounds
Spikenard.....	5 pounds
Wintergreen.....	1 pound
Birch bark.....	1 pound
Sassafras bark.....	1 pound
Wild cherry.....	8 ounces
Prickly ash.....	1 pound
Jamaica ginger.....	4 ounces
Nutmeg.....	4 ounces

Reduce the drugs to coarse powder; moisten with diluted alcohol and transfer

to a percolator of suitable capacity, and percolate with a mixture of 2 parts of water to 1 part of alcohol until the drugs are exhausted.

Sometimes it will happen that no matter how careful one may be in selecting the wintergreen and sassafras, these articles will be a little weak in flavor; in such event a decided flavoring should be used, and the following will prove an excellent formula:

Oil of wintergreen.....	2 ounces
Oil of sassafras.....	1 ounce
Oil of nutmeg.....	$\frac{1}{2}$ ounce
Angostura bitters.....	12 ounces
Alcohol.....	16 $\frac{1}{2}$ ounces

Half an ounce of this will very palatably flavor 1 gallon of the extract; 1 ounce very strongly and decidedly 1 gallon or 1 $\frac{1}{2}$  gallons.

Root beer syrup is made by adding one ounce of the extract to each 81 ounces of simple syrup.

**Invisible Ink.**—J. S. writes: "I have been asked by one of my customers for an ink that will only be visible when the paper upon which it is written is wetted with water. Can you aid me by furnishing a formula?"

The ink referred to is made by intimately mixing:

Linseed oil.....	1 part
Water of ammonia.....	20 parts
Water.....	100 parts

The mixture must be agitated each time before the pen is dipped into it, as a little of the oil may float on top which would of course, leave an oily stain upon the paper.

**White's New Hair Grower.**—E. S. asks for information regarding the above mentioned preparation. We are unable to furnish any; this is the first time our attention has been directed to it. Perhaps some of our readers may know something of the compound and will come forward with a formula.

**Poland Water.** S. K.—The published analysis of this water gives the following constituents with the amounts contained in one U. S. gallon:

Sulphate of potassa.....	0.156 grain
Chloride of sodium.....	0.566 grain
Carbonate of soda.....	0.133 grain
Carbonate of lime.....	7.287 grains
Carbonate of magnesia.....	0.541 grain
Oxide of iron and alumina.....	traces.
Silica.....	1.197 grains
Organic and volatile matter.....	0.233 grain

Total.....3.6759 grains  
A water of this kind can scarcely be classed among mineral waters strictly so-called; at best it is a fair representative of a spring water, and we are not aware that the bottlers claim more. It is a variety of table water which is handled principally by the grocery trade.

**Artificial Pulina Water.**—Here is a formula based on an analysis of the original water.

Potassium sulphate.....	$\frac{1}{4}$ ounce
Sodium carbonate (cryst.).....	4 ounces
Sodium sulphate (cryst.).....	46 ounces
Magnesium chloride.....	3 ounces
Magnesium sulphate.....	40 ounces
Water.....	10 gallons

The salts are dissolved in water, filtered if necessary, and then charged to a suitable pressure. This is a close approximation in strength to the natural water, but some formulas give a very much weaker percentage of saline strength.

**Hard Paraffin.**—M. and B. write: "Will you kindly inform us if there is anything that could be used to harden paraffin. We have a customer who uses quite a quantity for making plates used in printing. We have tried white wax but it don't seem to answer the purpose exactly. It works all right in winter, but gets too soft in summer. What we want is to use something that will keep as hard in

summer as in cold weather. Color is no object."

In this case we can only repeat what has been said in previous issues regarding similar queries. We know of no substance that could be added to paraffin for the purpose of hardening it. Paraffin is a general name for a whole series of homologous volatile hydrocarbons produced in the distillation of coal tar. The hardness of these paraffins depends on the temperature at which they come over and are collected. By making a special arrangement with a manufacturer, there will be no difficulty in having the hardest paraffin collected separately for your special use.

**Clemens' Solution of Bromide of Arsenic.** J. K.—The formula devised by the originator, Dr. T. Clemens, of Frankfort-on-the-Main, reads thus (parts by weight):

Arsenious acid.....	1 part
Carbonate of potassium.....	1 part
Bromine.....	2 parts
Distilled water, enough to make.....	100 parts

**Precipitation of Alkaloid.**—W. E. G., writes: "Would you please inform me what change takes place in making a solution of muriate of cocaine with borate of soda, the proportions being:

Sodii boras.....	gr. vii
Cocain. muriat.....	gr. ias
Aqua, q. s. ad.....	3 ss

M. Sig.: Eye drops.

The alkaloid is thrown out of combination by the alkaline salt. This reaction is not peculiar to the alkaloid cocaine alone; all alkaloids are precipitated from their salts by added salts whose reaction to litmus is alkaline.

## Correspondence.

### Galen, Jr.'s Cough Mixture.

Editor AMERICAN DRUGGIST:

William J. Quencer writes you in THE DRUGGIST of February 8 that the "Galen, Jr.'s cough mixture contains in each fluid drachm about  $\frac{1}{4}$  grain of morphine."

In your comments on the above you say "each teaspoonful will contain a little over  $\frac{1}{4}$  grain of morphine." This is wrong. Each teaspoonful will contain less than  $\frac{1}{4}$  grain of morphine; in fact nearer  $\frac{1}{8}$  than  $\frac{1}{4}$ .

JAMES H. WATSON.

NILES, MICH., February 22, 1894.

### A Protest from the Class of '94.

Editor AMERICAN DRUGGIST:

At a meeting of the "Class of '94," held on Friday, February 23, 1894, the following resolutions were submitted by Mr. N. Smith Kirk, and were unanimously adopted:

WHEREAS, there has appeared in a recent number of *The Pharmaceutical Era* an unauthorized, exaggerated, and untruthful account of Mr. J. H. Wurthman's report of Dr. Oscar G. Harrison's funeral; and

WHEREAS, This account has placed the aforesaid gentleman and the class in an unbecoming way before our fellow brethren and the public at large; therefore be it

Resolved, That we, the members of the "Class of '94," as a mark of respect for our deceased instructor, do condemn the account as a falsehood; and be it further

Resolved, That a copy of these resolutions be forwarded to THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and other pharmaceutical journals of this vicinity for publication.

FREDERIC WM. LINNIC, JR., Secretary.  
Class of '94, N. Y. C. P.

## News and Notes.

### The Mortar and Pestle Club of Rhode Island.

The first annual meeting of the Mortar and Pestle Club of Rhode Island was held in Providence on Wednesday, February 14, at 248 Weybossett street at 2 P.M. with President A. O. Hull in the chair. A lively interest was evidenced by an unusually large attendance representing all sections of the State; following the reading of the minutes of the January meeting the address of the president was read substantially as follows:

ADDRESS OF PRESIDENT ALBERT O. HULL.

The Mortar and Pestle Club of Rhode Island was launched into existence on Feb. 15, 1893. After making several attempts personally to get an expression of the druggists, or rather to wake them up to the urgent necessity of an organized effort to raise ourselves out of a very demoralized condition, into which we had been slowly but surely driven in trying to hold our trade from drifting into other channels, but to no avail.

After interviewing a few intimate and warm personal friends in the trade a call was made for a meeting on the above date, and was responded to by a mere handful of druggists, but which since proved were very earnest and sincere in their endeavor to make a grand struggle to better the conditions of pharmacists of this vicinity. As the meeting was called to order I felt very much discouraged to find that so few were sufficiently interested in their own welfare to present themselves at this meeting.

Realizing that I had undertaken quite a contract to organize the trade of this State, and being aware that I might enlist the assistance and advice of one who I knew had had considerable experience in this line, I extended an invitation to Mr. Henry Canning of Boston, who was then executive committee-man for Massachusetts of the Interstate Retail Druggists' League, to attend this meeting. Mr. Canning, being present, gave me considerable encouragement by saying that I need not feel so discouraged and disappointed at having only fifteen druggists present, as they in the large city of Boston had about the same number present at their first meeting only a few days previous, but with these fifteen willing workers I have pushed on until the club at present has a paid up membership of over 60 per cent. of the retail trade of the State.

I think we have been remarkably successful considering that our druggists are scattered all over the State, requiring a great amount of patience and persistency to obtain the percentage we have at the present time. I am also very grateful to our very efficient traveling salesmen for their hearty co-operation.

#### RECOMMENDATIONS.

I would recommend that we make an addition to our list of committees to be known as a "Grievance Committee," with their duties clearly defined.

I would suggest that a special committee be appointed to revise that part of our constitution and by laws so as to more fully define the duties of such officers and committees as are incomprehensible, as I am led to believe that such must be the cause for the inactivity of some of our officers and committees for the past year. I certainly do not for an instant believe we have a member of this club but would willingly perform such duties as are imposed upon him if he thoroughly understood what was expected of him.

I would also recommend that we petition the wholesale druggists to refrain from selling to others than recognized dealer at wholesale prices.

I would suggest or ask that each and every member of this club, and in fact every druggist, in his dealings with manufacturers of proprietary goods, request such manufacturers to place their products on the League contract plan, and adopt some perfect system of placing "identification marks" upon such goods, if they have not already done so, that it may be possible to trace their goods to the consumer, then guarantee them your hearty support when such system has been adopted, preferring to have dealings with only those manufacturers who have a system of protection that protects.

I would also recommend that the committee on commercial interests be instructed to correspond with influential pharmacists in the larger cities of such of the New England States as have not yet taken steps toward organization.

#### IMPORTANCE OF LOCAL ORGANIZATION.

Aside from the main point of interest we have in the past year been earnestly working for the druggists at large, namely for the improvement in the profits of our proprietary departments.

Locally, we should use our united strength to obtain greater improvements in our State pharmacy laws, which are considered by most of our earnest workers to be too antiquated or crude to be of service in this advanced stage of pharmacy. The methods by which the members of our board of pharmacy are appointed is entirely unsatisfactory. The examinations are not of that practical

standing that is required to uphold the competency of the candidate who has the certificate of registration guaranteeing him to the profession and the public to be proficient for his calling. The pharmacist who (as is quite frequently the case) employs or engages a clerk with only the State registration certificate as a guaranty of competency finds that it is not backed by its holder.

I repeat, organization first, and by organization many desired necessities can be obtained.

#### THE NATIONAL BODY.

We have in the Interstate Retail Druggists' League a national association with a constitution that is all we can ask for, to carry out plans upon which we have been at work for the past year, with an ever increasing support, which I feel assured in a comparatively short time will be of sufficient members to represent 80 per cent. of the druggists of the greater number of our States, and numbers tell.

At Montreal in 1888 we had very little weight, but you will notice that at Detroit in 1893 our delegates were recognized, their power was felt; we came very nearly getting all we asked for. Now in 1894 we will go before the annual conventions with our requests backed up by such overwhelming majorities of our retail druggists that they will gladly accede to our demands; the mutual benefits to be derived will be so apparent that the struggle will be lost in unanimity.

Local organization is absolutely necessary that we may be prepared to send good and efficient men as delegates to the conventions, as has been evidenced this year at Chicago, Detroit, and latterly New York.

In conclusion I will ask you to extend a vote of thanks to the wholesale druggists of Providence for their much valued assistance.

I hope that every one of our druggists feels the necessity at heart of placing his name on our list to become a member of this club whether John Smith, Paul Jones, Chicago or New York, or other supposed leaders do sign or not, put your name first, and make Little Rhody the first State in the Union to complete her list of 80 per cent., for as has been said of her before, that her size was not determined by square feet, but by heads.

Following the above address reports were made by the financial secretary and treasurer which showed a balance on hand and a very satisfactory financial condition in the club's affairs.

The election of officers for the ensuing year resulted in choice of Albert O. Hull, of Central Falls, for president; Henry J. Alfreds, of Providence, for vice-president; Edgar K. Gridley, of Pawtucket, for secretary; Howard A. Pearce, of Providence, for financial secretary and treasurer.

The president then announced the appointment of the following committees:

On finance: Wm. E. Cates, of Providence; Chas. A. Glancy, of Pawtucket, and Frank A. Jackson, of Woonsocket.

On membership: H. L. Swindells, of Mantion; R. S. Soper, of Providence, and R. F. Linton, of Woonsocket.

On ways and means: Jas. A. Robinson, M.D., of Pawtucket; Howard A. Pearce and B. A. Payne, of Providence, and Chas. F. Gladding, of Warren.

On scientific interests: John Metzger, of Providence.

On commercial interests: Jas. O'Hare, of Providence.

On social interests: Henry J. Alfreds, of Providence.

A large number of members were added to the club's list at this meeting, and a feeling of approval of its work in the interest of the retailer is manifesting itself throughout the entire trade of the State.

After adjournment a collation was served which was enjoyed by those present, and when cigars were lighted interesting and instructive remarks of a most practical and business-like character were made by President Canning, of the I. R. D. League; F. W. Reeves and Geo. W. Cobb, of the Apothecaries' Guild, of Boston; also a report was made by the club's delegates, I. M. Smith, H. J. Alfred and E. K. Gridley, who attended the special convention of the I. R. D. League which was held in New York, on February 6, of the proceedings of the convention together with a concise statement of the plan approved by the League, which plan met with the hearty indorsement of every one present.

### New England Druggists Organize.

A largely attended and enthusiastic meeting of New England's retail druggists was held in Boston on the afternoon of Feb. 21. It was called for the purpose of discussing the plan of the Interstate League and also for perfecting arrangements looking to the formation of a body embracing the whole of New England. The meeting was brought about by the following circular issued from the office of the Executive Committee of the "Apothecaries' Guild" of Boston and vicinity.

A very important meeting of the retail drug trade of New England will be held at Garfield Hall, corner Washington and Dover streets, Boston, at 2 P.M. February 21, 1894. All presidents of local associations and all men prominent in the trade have been invited to attend. We believe it possible, with the plan adopted at the League meeting in New York, February 7, in connection with a thorough organization of the trade, that absolute protection is assured. A full explanation of the plan, and the best way to organize the trade will be made by the president of the Interstate League and others.

If you cannot come send a delegate from your association, or from your city or town; it is important that you attend. You may never have another chance to help yourself and others. Proprietors must be asked to adopt this plan, and the retail trade only can induce them to adopt it; there must be united action at this time, or the plan will not be a success. Will you try to make it a success? If so, then come to this meeting.

N. W. STILES, President.  
C. P. FLYNN, Vice-President.  
F. W. REEVES, Secretary.  
G. C. COBB, Treasurer.

Executive Committee: S. A. D. Sheppard, W. C. Durkee, C. A. Charles, C. A. Miller, A. L. Wyman, U. S. Garcelon, E. E. Jennison, G. W. Flynn, C. A. Brown, J. W. O. Mealy.

The response to this notice was generous in numbers, far exceeding the expectations of its instigators. Many members of the Guild were present, and the out-of-town druggists were: A. G. Schlatterbeck, Portland, Me.; James Duggan, Norwich, Conn.; G. F. Soule and Frank A. James, Manchester, N. H.; N. S. Whitman and W. H. Blanchard, Nashua, N. H.; Massachusetts was represented by Frank M. Harris, Worcester; H. M. Whitney, G. F. Frederick and Chas. F. Clark, Lawrence; C. B. Emerson and G. B. Holden, Haverhill; J. Allen Rice and H. E. Morgan, Milford; John T. Manning, Pittsfield; Henry A. Esterbrook, Fitchburg; G. C. Brock, F. H. Butler, Ed. Ellingwood, Geo. C. Osgood, Chas. E. Carter, O. L. Field and H. A. Toupin, Lowell; Warren Joppa, C. E. Brown and Chas. H. Hart, Lynn; Thos. B. Nichols, Jos. N. M. Edwards, W. E. Luskomb, Jesse F. Upton and Farrington & Co., Salem; C. W. Perry, Natick; Henry Adams, Amherst; M. F. Willcox, Bridgewater; Geo. S. Curtis, Peabody; Geo. F. Black, Watertown; W. H. Weed, Stoneham; C. F. Jeffers, Swampscott, and A. G. Durgin, S. F. Willard, Chas. H. Hearn and S. A. Pierce, Quincy.

The meeting was opened by President Stiles, who called upon President Canning of the Interstate League to preside. President Canning explained that the meeting was called more distinctly for the purpose of bringing in outsiders and to promote a thorough organization in New England. He then alluded to the rapid strides which the League is now making, and to its strength of members, especially in the East. "Organization," he said, "follows the elucidation of this plan. The more you talk about this subject the more the League spreads. It is entirely commercial and embraces the tripartite idea, national, State and local, in make up. It gives perfect representation in small compass by delegates. Your local organizations are entirely independent, as far as local work is concerned, and is represented by a State executive who is in



touch with the central body. The present plan is thought to be the best to accomplish the object; it prevents retailers buying from proprietors, placing all upon the same purchasing basis. The two classes of retailers who buy from proprietors, the one for his own sales, and the other to divide with his neighbors, will gladly give up their rights in this particular because of the increased profits on the selling end. The plan is something tangible to grasp; organization is the end in view, however; if the plan is not perfect it can be changed. It is not safe for those in localities now enjoying full prices to imagine that they are secure against the advent of the "cutter" for the members of that ilk are noted for ferreting out such districts. In verification of this look at the West, where a few years ago there were no "cutters," and the druggists of that section could not be interested in organization. Now, however, Chicago, St. Louis and Cincinnati are the worst cutting places in the country. Control of one market will not accomplish our object; the movement must be national to be a success, affecting all distributing centers alike."

Mr. Canning then delved into the history of the organization and closed with a description of the "Botanical Club" of Louisville, Ky., to which he alluded as the local organization, par excellence, in this country.

Letters expressing confidence in the League work were then read from W. P. Draper of Springfield, Irving M. Smith of Providence, and Geo. C. Frye of Portland. J. Allen Rice, president of Massachusetts S. P. A., was called upon, and he predicted success by all working together. He thought the plan admirable from the standpoint that it interested retailers and jobbers alike. Frank M. Harris, president Worcester County Association, gave an account of the satisfactory work of of that body, during which he stated that the "Boston Store," a department establishment, and the co-operative store of Worcester were both selling patents at the prices adopted by this association. At Clinton, once a cutting center, these prices were also in operation.

A. G. Schlotterbeck of Portland gave an interesting account of the local organization of that city, which although not a branch of the League is working upon similar lines. Mr. Schlotterbeck, while speaking only for himself, stated that Portland druggists were willing to take any action benefiting the fraternity at large, and was of the opinion that this body would eventually become a branch of the League. Portland, according to this speaker, is now charging very nearly full prices, and he thought the prices of his city would be adopted throughout Maine. Mr. Schlotterbeck upon being asked why full prices were not charged, wittily replied that some of the members of his organization considered that full prices would be too much of an education for their old customers.

James Duggan of Norwich, president Connecticut Pharmaceutical Association, sketched an organization of the druggists of his district. With few exceptions, he said, full prices are charged in Norwich. He related an experience with a department store of his town, which began selling patents, but abandoned this line upon the representation of the officers of his association. President Duggan is interested in the League movement and left the meeting with a bundle of petitions to be used in his State.

President L. F. Soule spoke for the Manchester, New Hampshire, Association, which is a "paid in" branch of the League.

Dollar articles are selling for 85 cents in his city, and for 50 and 25 cent articles full prices are obtained. The one "grocer cutter" of that city is gradually disposing of his stock. President Whitman of the Nashua Drug Co., an association of the druggists of that city organized under state laws, said that every handler of patent medicines in his city sold according to schedule prices: patents little used are sold at full prices; on those largely in demand there was some reduction; 25 cent articles, however, were sold at full prices. Milford, twelve miles distant, has adopted Nashua's prices.

Secretary Blanchard, also of the Nashua Association, gave an account of a successful combat of his organization with a "cutter" who intended to revolutionize the drug trade of that city. He closed by tersely stating that as a result of this contest his association had the "cutter's" fixtures to dispose of.

J. H. Manning of Pittsfield said that eleven of the twelve druggists of his city were ready to join in the movement. He thought an organization of his county could easily be accomplished.

Henry M. Whitney of Lawrence, president of the Massachusetts Board of Pharmacy, strongly urged organization; he thought the movement eminently wise, and one which only "a fool, idiot or kicker could find fault with." He said we should help along those who are endeavoring to aid us. "Can and will we organize? If not, then quietly submit as servants to our masters; if yes, then you as retailers are a power, and can demand and secure what you ask." Mr. Whitney's closing allusion to President Canning as the "Moses of New England leading the druggists into the land of milk and honey" met with spontaneous applause.

G. C. Brock, president of the Lowell Association, stated that by the alphabetically arranged schedule of prices adopted in his city the druggists had increased their net profits from 15 to 20 per cent. As a point for those about arranging a schedule of prices he suggested making little variation to the price adopted on any patents; i.e., if most dollar articles are to be sold at 90 cents, have the exceptions as few as possible.

Messrs. Stacey, Sheppard, Flynn, Butler of Lowell, Charles Malden, and Nichols of Salem also participated in the discussion, the consensus of opinion being that organization is the keynote to success.

State Executive Durkee then gave an admirable synopsis of the League plan and its workings. Treasurer Cobb of the Guild detailed the plan which he had originated for perfecting an organization of all New England. The following are the salient features of this admirable scheme:

A complete organization of the retail trade throughout the section above mentioned upon the Interstate League basis and at an economy of time. Its officers are to consist of a president, six vice-presidents (one from each State), a secretary and treasurer. Its membership is to be composed of the presidents of the different local organizations, or where none exists the district is to be represented by some local druggist. Each vice-president is to be the local executive officer of his own State, and he is to appoint one or more officers in each county of his state whose duty it shall be to canvass his section for members of the Interstate League, collect the membership and report the names of any cutters in his district. The president of this new body is to act in unison with the president of the Interstate League. The dues are nominal—only \$1 from each organization. As the work of organization

must eventually be divided up the plan devised is to distribute it somewhat, and possibly lighten the labors of President Canning.

Mr. Cobb's ideas met with immediate approval, and it was voted to form an organization to be known as the "New England Retail Druggists' Union;" it was also voted that the chairman appoint a committee to nominate officers and draft by-laws for the same. Subsequently President Canning appointed the committees.

### Gotham Gossip.

Prominent among the well-known personages in attendance at the recent annual encampment of the Grand Army of the Republic, held in Rochester, was General Day, of the wholesale drug firm of F. R. Arnold & Co., this city.

Alfred H. Mason, F.C.S., F.R.M.S., etc., of the firm of Seabury & Johnson, was very agreeably surprised on receiving a handsomely framed photo group of the College Board and Faculty of the Montreal College of Pharmacy, which was presented by the board as a souvenir of his connection with the college as one of its respected presidents.

At a meeting of the class of '94, N. Y. C. P., held February 2, the following executive committee was appointed to officiate at the commencement exercises: W. A. Brater, W. L. Clark, W. J. Donovan, F. P. Hiltz, N. S. Kirk, J. R. Wood and J. H. Wurthmann. The committee held its first meeting February 12. P. J. Ehr Gott (as president of the class being an *ex-officio* member) was unanimously elected chairman.

Polk Miller, of the Polk Miller Drug Co., of Richmond, was the bright particular star of the evening at the first entertainment of the University Club on Saturday. Several of the entertainers were members of the club, the list including such well-known men as Burton Harrison, Gordon McCabe, James Whitcombe Reilly and Thomas Nelson Page, but the general verdict was that as a delineator of character Polk Miller was *facile princeps*. Mr. Miller also created a very favorable impression at the Press Club dinner at the Marlborough on the 27th inst.

None of the German-American druggists in this city is more widely known among the craft than Sidney Faber, the popular secretary of the New Yorker Deutsche Apotheker Verein. The post of secretary to an active organization of druggists of this kind is always an arduous one, and it is something to the credit of Mr. Faber, and of which he may well be proud, that he has transacted the duties of secretary for close onto six years, or as long as the organization has been in existence. He is an enthusiastic amateur photographer, has done good work in popularizing the use of the camera. The show windows of his pharmacy at 58th street and Second avenue present quite a distinctive appearance in this respect, containing as they do numerous photographic appliances, cameras, chemicals, etc. Mr. Faber is well read and one who finds considerable enjoyment in traveling. Cuba is his favorite country for an excursion, as he speaks the language fluently and finds much to admire in the character of the Spanish people and native Cubans.

"To merely wish is of little account; to succeed you must earnestly desire and this desire must shorten your sleep."



### Boards and Associations.

**NEW YORK CITY BOARD OF PHARMACY.**—At the February meeting of this board the following applicants were successful: Samuel Fieldman, Nahum Fieldman and F. L. Wilcox. Thirty-one pharmacists were registered during the month.

**ALUMNI OF THE MASSACHUSETTS COLLEGE OF PHARMACY.**—The next meeting of the association will be a social one, and will be held at the college building, Tuesday evening, March 13, 1894, at 7.30 o'clock, to which the members of the class of '94, with ladies, are invited. There will be an entertainment provided.

**THE NORTH CAROLINA BOARD OF PHARMACY** will meet in the city of Raleigh on Wednesday and Thursday, April 11 and 12, 1894, at 9 o'clock A.M., for the purpose of examining such candidates for license to practice pharmacy as may appear. Any further information will be cheerfully furnished by the secretary of the board, Wm. Simpson, Raleigh, N. C.

**KANSAS PHARMACEUTICAL ASSOCIATION.**—The secretary of the Kansas Pharmaceutical Association informs us that the date for the annual meeting of the Association has been set for May 29, 30 and 31 and not May 22, 23 and 24, as stated in a previous notice. The meeting will convene at Selina. The secretary can be addressed at Hiawatha, Kan.

**THE CLEVELAND PHARMACEUTICAL ASSOCIATION** held a banquet at the Forest City House, Cleveland, on the evening of February 20. Lewis C. Hopp presided and acted as toastmaster. The object of the banquet was purely to promote social relations between the druggists of that city. The Cleveland Pharmaceutical Association was called into existence about fourteen years ago by the coming into their city of a cut rate store. Through the efforts of the association the existence of this store was very short lived, and since that time Cleveland has been free from cutters of any description.

This Association conduct in connection with its other duties a pharmacy school which has been doing some excellent work during the past two years.

**THE ARKANSAS BOARD OF PHARMACY** met in the Senate Chamber in the city of Little Rock, on the 14th day of February, with J. M. Anderson, F. G. Kerr and J. M. Colburn present. There were 14 applicants for registration, of which number the following were successful: J. W. Smith and P. E. Witt, of Morrilton; J. C. Carnahan, of Bentonville; J. H. Bell and Frank Brush, of Hot Springs; R. P. Sharp, of Jonesboro, and Miss M. E. Lovejoy, of Devalls Bluff. The next meeting will be held in Hot Springs, June 8, next. This meeting will follow immediately after that of the Arkansas Association of Pharmacists, which occurs at the same place on the 5th, 6th and 7th of June, and it is hoped that there will be many applicants and that they will come in time to attend the association. For further information address W. W. Kerr, secretary, Russellville, Ark.

**THE NORFOLK AND PORTSMOUTH ASSOCIATION.**—The Norfolk and Portsmouth Pharmaceutical Association, Norfolk, Va., have fitted up, at considerable expense, an assembly room, corner Main and Atlantic streets, and invite from manufacturers and others specimens and samples of rare crude drugs, chemicals, pharmaceutical implements, etc., for permanent exhibition. The room, it is stated, will be open at all times to physicians and pharmacists, whether members or not. A reading department and library is con-

nected, and it is the combined effort of the Norfolk and Portsmouth pharmacists to contribute what they can toward the elevation of the profession. The association announces that contributions of rare drugs, chemicals, pharmaceutical literature, new publications, books, etc., will be very gratefully received, and may be addressed to the secretary, J. W. Thomas, Jr., Norfolk, Va.

### Trade Notes.

#### A Good Thing to Have.

The interesting announcement of Raymond & Co., on the front cover page of this issue, should be carefully noted by every druggist who wishes to add a paying specialty to his general list.

#### Pill Boxes.

E. N. Rowell, of Batavia, N. Y., is placing on the market a handsome line of pill and powder boxes at figures which are somewhat under the ruling market price. Samples and prices can be obtained by writing to him and mentioning THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

#### Merck's Year Book.

Merck's Year Book for 1893, which has just been issued, is a handy volume containing over one hundred pages of original communications, dealing with new remedies. The text is in the German language but printed in Roman type. The compilation is a valuable one which should receive a wider circulation by being printed in the English language.

#### To Extend the Soda Water Business.

Those of our readers who are desirous of extending their soda water business during the coming year will do well to write to the D. B. Scully Syrup Co., manufacturers of rock candy and rock candy syrup, 45-51 River street, Chicago, Ill., for a copy of their descriptive Price List and market quotations on Pure Rock Candy Syrup. In bringing the merits of their Pure Rock Candy Syrup to the attention of pharmacists the D. B. Scully Syrup Co. state that some manipulators use the rock candy "drips" containing levulose, uncrystallizable invert sugar, etc., and call it "triple refined." The D. B. Scully Syrup Co. use the purest form of cane sugar, which requires no "triple" or other refining; it is simply pure, a word which in the circumstances has no superlative.

#### An Elegant Volume.

A very handsome catalogue of Low's Art Tile soda fountain has just been published by the Low Art Tile Company, Chelsea, Mass. The volume is unique from cover page to finish and is an artistic production of a more than usually high order of merit. The illustrations are eight in number and six of these are colored plates—samples of the highest art in lithography. The book measures 9 by 11 and is bound in stiff boards. Every druggist should have a copy of it if only for the colored plates, which will make handsome wall ornaments when framed. The catalogue can be had from the head office at Chelsea, Mass., or from any of the salesrooms of the company, of which the following is a list: Boston, 51 Portland street; New York, Havermyer building, 31 Church street; Washington, 908 G street, N. W.; Buffalo, 104 Pearl street.

### Popular Tablets.

The E. L. Patch Company, manufacturing pharmacists of Boston and New York, call special attention to their Novus Lemonade Tablets and Patch Compound Lithia Tablets, two popular and rapidly selling novelties originated by the E. L. Patch Company. That these goods have merit has been evinced by the numerous imitations which have appeared since their introduction. New York druggists can obtain supplies of these and other specialties of the E. L. Patch Company from Kenhn & Lubbers, 96 Fulton street, who are agents for New York and vicinity.

### Notes on Prices.

#### New York Package Prices.

Wm. H. Raser, drug broker of 32 Platt street, New York City, in his circular letter of February 21 says:

There is little of interest to note; prices generally show few important fluctuations. Opium has been quite active for several days past and a material advance has taken place, sales having been made in large way at prices ranging from \$2.85 to \$3; to-day \$3.25 is generally quoted, though single cases can yet be bought at \$3.15. Broken parcels 5c. @ 10c. advance. Pure powdered opium: \$3.65 @ \$3.70 will still buy; most holders have advanced to \$3.75. Quinine continues to be in fair request though no special activity is noted. Foreign bulk is held at 23¼ @ 24c.; for round lots 23¼c cash would be accepted.

Acid citric is easier at 42½c. for kegs, 5 kegs 42c. Acid carboic is reported higher abroad, and prices here are a trifle firmer. Acid oxalic is firmly held at 6½c. for German and 6¼c. for English. Arsenic is firm on spot at the recent advance to 3¼ @ 3½c.; to arrive it is quoted at 3½c.

Bark Cascara Sagrada is depressed due to recent and prospective large arrivals. Morphia has been marked up 10c., the advance had been discounted for some days by second hand holders, who had quoted 10 @ 20c. oz. premium for P. & W.'s brand.

Calomel, Howard's, in 1 lb. bottles has been reduced to 75c. Gum kino continues scarce and high. Manna is quoted at a slight decline. Menthol tending lower, spot supplies being quoted at \$5 and to arrive \$4.50 is named; the decline is due to reported heavy shipments from Japan.

Naphthalene is offered at 3 @ 3½c. for flake and 4 @ 4½c. for white balls; quantities on contract 3½c. Nitrate silver declined in sympathy with the low price for the metal. Oil peppermint is dull with values easier.

Ipecac root shows an easier tendency. Mexican sarsaparilla slightly lower. Olive oil is held higher.

Seeds, canary, firm with a fair inquiry. Caraway, Dutch, in moderate demand at the recent advance. Celery seed dull and lower.

Spices are dull and depressed with the exception of allspice, which has been marked up a fraction. Ginger appears to be the weakest article, a further decline being noted. Mace is easier; nutmegs quiet; pepper, Singapore black, is lower.

Gambler continues high, spot stocks being closely concentrated. Cutch unchanged. Spirits turpentine advanced 1c. gallon with a firmer tendency. Chloride lime in casks is offered ex-dock at \$2 @ \$2.05. Juniper berries are higher on unfavorable reports from abroad.

## Review of the Wholesale Market.

NEW YORK, February 28, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The business in drugs, dyestuffs and chemicals has only been of moderate proportions during the past week, theof having been no large movement in any of the various staples, even the jobbing trade being of a limited character. Prices are maintained in most instances with strength and confidence, though as in all cases some few exceptions are noted, the particulars of which are fully given in the following review:

ADVANCED.	DECLINED.
Sal ammoniac.	Wood alcohol.
Opium.	Sugar of milk.
Caffeine.	Cuttle bone.
St. Ignatius beans.	Nitrate of silver.
Potassium permanganate.	
English carbonic acid.	

## DRUGS.

ALCOHOL has remained steady at \$2.24 @ \$2.28, with the usual rebate from the Trust managers.

ALCOHOL, wood, has undergone another decline during the interval and the market is still somewhat unsettled; 95 per cent. is now quoted 70c. and 97 per cent. 75c.

BALSAM COPAIBA has sold in moderate quantities to jobbers at 33 @ 40c.; the remaining stock is small and, somewhat closely concentrated.

BALSAM PERU is firm upon the basis of \$1.65 @ \$1.75 for stock from direct sources. The quantity here is small and prices abroad are cabled higher.

BARK, BUCKTHORN, has been in demand during the week, and we are reported a sale of 1,000 lbs. at 6½c. Cascara sagrada meets with fair jobbing inquiry at the range of 5½ @ 5¾c.

BUCHU LEAVES, short, have been actively inquired for, the current sales being within the range of 12 @ 15c. as to quality.

CAFFEINE has been advanced, the quotation now standing \$2.35 @ \$2.45 as to quality.

CACAO BUTTER, foreign, has been actively inquired for during the week with numerous sales within the range of 32½ @ 34c. There has been some little demand for Cadbury's English, and parcels have changed hands upon the basis of 32½c.

COD LIVER OIL, Norwegian, is meeting with a fair seasonable demand and values are firm, the quoted range being \$19 @ \$22 as to quality. The proposed change in the tariff is being given some consideration. The present rate is 15c per gallon, but in the Wilson bill now before Congress 20 per cent. ad valorem is proposed.

CUBEB BERRIES are firmer abroad though the tone of the market here does not improve. Prime goods held at 16 @ 18c., and ordinary quality 14 @ 15c.

COCA LEAVES are dull at nominally 15 @ 2½c. for Truxillo, and 28 @ 37c. for Huanaco, as to quality.

CUTTLE BONE is weaker with sellers at 9 and 10½c., with no marked firmness at this range.

HENBANE LEAVES are in request, several parcels having changed hands during the week at the nominal quotation of 10c.

JABORANDI LEAVES are selling in limited quantities within the range of 25 @ 35c. as to quality.

JUNIPER BERRIES continue firm at the recent advance; numerous small sales are reported at the current range of 2¼ @ 2½c.

MORPHINE continues in demand and firm upon the basis of \$2.50 in eighths. From

outside hands \$2.50 @ \$2.60 is asked. Scotch from the hands of the agents offers at \$2.25 in eighths and \$2.00 in bulk.

NAPHTHALINE.—English balls are now offering for forward shipment at the equivalent of 3¼c. laid down. The spot price is nominally 4c.

OPIMUM has ruled firm during the week and the market has marked a steady upward movement in the drug. To-day the situation is a shade less strong owing to the retirement of morphine manufacturers as buyers. The situation is still in favor of sellers, though values have weakened somewhat. Cables from primary sources indicate a rising tendency influenced by the continued prevalence of frost and serious damage to the fall sowings. The inside price quoted from Smyrna is 11s. 5d., the range being quoted up to 11s. 9d. In this market case lots may now be obtained at \$3, though \$3.10 is generally asked. For jobbing quantities \$3.15 @ \$3.20 is nominally quoted, though this range can probably be shaded. Powdered continues to offer at \$3.75, though no special activity is displayed.

PIPERAZIN-SCHERING has been reduced in price one-half by the agents here. They are desirous of withdrawing the 5 gramme package from the market and ask the trade to return this size to them and in return offer to ship a like quantity of the 10 gramme package without additional charge.

QUININE has been in fair consumptive demand during the week without, however, much attention being given to quantities. Outside parcels, foreign, are held and selling at 23½ @ 24c., while from makers' hands 25c. is quoted as strictly inside. The price of domestic is firm upon the basis of 27½c. for large bulk.

SAFFRON, Valencia, is firmer with \$5.75 now regarded as an inside figure.

ST. IGNATIUS BEANS have further advanced, 40c. being now required. The stock is small and closely concentrated.

SUGAR OF MILK has felt the effects of sharp competition among manufacturers, and local agents now offer to book crystals at 13c., the "National" brand of powdered 10c. and "Empire" 8c. The above figures show a decline of 3 @ 4c. per pound.

VANILLA BEANS have sold well during the week, 2,500 pounds of medium grade having changed hands. Higher prices are looked for the coming year owing to short crops.

WAX, Brazil, continues in good demand, recent arrivals finding easy sales. The market is firmer in tone with 22c asked for No. 1, 20c. for No. 2, and 17c. for No. 3. Japan is selling moderately at 7½c., though 8c. is asked for small parcels.

## DYESTUFFS.

CUTCH is in steady fair request and firm at 5½ @ 6c. for best grades SM and 5½ @ 5¾c. for HT.

GAMBIER remains rather quiet, but the market continues firm, with 4¼ @ 5c. asked for stock in store. Goods to arrive are quoted 4¼ @ 4¾c.

NUTGALLS, blue Aleppo, are unchanged from 13½ @ 14½c., within which range a moderate demand is "experienced."

SUMAC, Sicily, continues in fair steady jobbing inquiry with the current sales at \$72.50 @ \$77.50 as to brand and quantity.

TURMERIC continues to find sale in small quantities at 6½ @ 7c.

## CHEMICALS.

ALUM is in steady fair request, with the current transactions at \$1.70 @ \$1.75 for lump, and \$1.75 @ \$1.80 for ground.

ARSENIC, white, is scarce, and offered sparingly; supplies are held with some firmness within the range of 3½ @ 3¾c. as to quantity and brand.

CARBOLIC ACID, English, is again cabled higher abroad, and as a result 13c. and 20½c. is asked for drums and bottles respectively.

CHLORATE OF POTASH continues slow of sale, though the quotation of the market remains steady at 14¼c. for German, and 14½c. for English.

CREAM TARTAR is without quotable change as manufacturers continue to meet the requirements of their customers at 17½c. for crystals, and 17½ @ 18c. for powdered.

NITRATE OF SODA is quiet though firm. The range of the market stands at \$1.90 @ \$2, according to quantity.

NITRATE OF SILVER has been reduced again by the manufacturers, who now quote 43 @ 44½c. for quantities, the inside for lots of 1,000 ounces.

OXALIC ACID is scarce and well maintained at 6½ @ 6¾c. for German and 7 @ 7¼c. for English.

PERMANGANATE OF POTASH is firmer and in instances higher; small crystals quoted 16½ @ 17c.

QUICKSILVER does not vary from 45 @ 46c.; small sales are making at this range.

SAL SODA, domestic, is easy with 70 @ 75c. quoted f. o. b.

SAL AMMONIAC, white grain, English, has advanced to 6½ @ 7c., this action being due to the small available supply and better foreign advices. German is generally held at 6½c., though in instances this figure might be shaded slightly.

## ESSENTIAL OILS.

ANISE is moving out in moderate quantities to the trade at \$1.42½ @ \$1.45.

BERGAMOT continues to offer at \$1.75 @ \$2.25, with numerous small sales within this range.

CAJEPUT is easier, though supplies do not offer below 35 @ 40c.

CASSIA continues dull, though 80c. appears to be the limit of buyers' ideas.

CLOVE is a little unsettled, but 50 @ 53c. still represents the range.

CUBEB is quiet though steady at \$1.50 @ \$1.70.

LEMON does not change from \$1.30 @ \$1.65 as to brand.

OTTO OF ROSE is held at the range of \$7.50 @ \$9. as to brand with a moderate trade reported.

PENNYROYAL is quiet, but prices are maintained with a fair show of steadiness.

PEPPERMINT appears to be in improved position, but the article is given but little consideration at the moment. HGH has been passing out to the trade in moderately large quantities with \$2.80 @ \$2.85 the general asking price. Bulk is well maintained at \$2.45 @ \$2.60 as to quality.

WINTERGREEN is quiet but without quotable change.

## GUMS.

ALOES, Curacao, are in good jobbing demand and firm at 2¼ @ 3c.

ASAFETIDA is selling quite freely in jobbing quantities at the range of 15 @ 30c. as to quality.

BENZONIN has continued in fair moderate inquiry with the sales at 27 @ 40c. as to quality.

CHICLE is maintained steadily at 27 @ 28c., though this range rather exceeds buyers' limits.

CAMPOR is meeting with fair moderate inquiry at the previous range.

DAMAR, Batavia, is firmer with 15c. quoted as an inside price for best.

KINO is yet held at \$1 and jobbing purchases are said to realize this figure.

SENEGAL is quiet but firm upon the basis of 9 @ 9½c. for sorts.

SHELLAC continues in steady fair request and firm upon the basis of 31c. for VSO and 25 @ 26c. for TN.

#### ROOTS.

ACONITE is passing out in moderate jobbing quantities to the trade at 11½ @ 12c.

CALAMUS is quiet but steady upon the basis of 7½ @ 8c.

GINGER continues in fair steady inquiry with sellers requiring 16 @ 18c. for bleached.

GOLDEN SEAL is maintained at the full previous range of 22½ @ 23c., though there is no inquiry at the moment.

IPKAC is firmer and the tendency of the market is higher. London quotes 6s. 6d. for best grades, while for the better qualities in this market only \$1.40 is asked. Inferior stock may be obtained here at \$1.30.

RHUBARB meets with moderate sale at the previous range of 25 @ 26c.

SARSAPARILLA, Mexican, is offering from importers' hands at 9c., but business is somewhat restricted as the figure quoted is above the ideas of buyers.

SENEGA is quiet though firm at 39 @ 40c. for Manitoba and Minnesota.

SNAKE, Texas, has been inquired for, and we hear of numerous small sales at 30c., though the available stock is small and closely concentrated.

#### SEEDS.

ANISE, Italian, sifted, is firm with limited transactions at the quoted range of 10 @ 10½c.; business is somewhat restricted owing to the fact that buyers' limits are below the quoted prices.

CELERY, French, is generally held at 15½c. up, though in one instance 15c. is quoted as acceptable. A parcel of inferior domestic is reported to have changed hands at 13½c.

CORIANDER is in better demand, but buyers' limits are below those of holders; 6c. is asked for bleached and 5½c. for unbleached.

CUMMIN has been selling freely for export to Mexico with 10c. accepted for new and 9½c. for old.

HEMP, Russian, is cabled higher abroad, though supplies are yet obtainable here at 2½ @ 2¾c.

MUSTARD, upon spot, continues quiet but firm. On the coast yellow is held at 3¾c. f.o.b. and brown Trieste at 3¼c. Of the stock held there some 2,000 bags brown have sold recently, a portion of which was taken for export.

POPPY, German, is dull but steady at 5¼ @ 6c.

#### Rhode Island.

S. J. Briggs & Co., of Providence, are to have a new fountain; it is to be supplied by the Low Art Tile Co.

The Low Art Tile Co., of Boston, are manufacturing a large and expensive soda fountain for A. W. Ferneer, of Providence.

E. C. Danforth, of Providence, has gone out of business. This is the store which was run for many years by A. L. Calder. It is said that "cutting" was the cause of the business being abandoned; whether this is so or not it is certain that in close proximity to Mr. Danforth's store is an establishment run by a firm which has achieved notoriety throughout New England for its "cutting" propensities, and as this firm has pursued its peculiar methods in this city, the deduction drawn above seems to be a proper one.

#### A Bowling Contest.

The second series of games in the Drug Trade Bowling Tournament was rolled on Saturday afternoon, 24th inst., on the alleys at 409 Pearl street. There was a large and enthusiastic attendance from the various houses concerned, and the closeness of the scores excited a high degree of interest throughout. Results were as follows:

##### FIRST GAME.

Dodge & Olcott.....665  
McKesson & Robbins.....641

##### SECOND GAME.

McKesson & Robbins.....698  
C. G. Bacon & Co.....581

### Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED first-class salesmen to sell side line on commission; only those selling to first class trade need apply; state the line of goods now carried; samples small. Address H. T. C., care this office.

#### POSITIONS WANTED.

POSITION WANTED in some town in Connecticut by a young man aged 25 years; 8 years' practical experience in retail drug store; can furnish good references. Address "Cortex," this office.

WANTED.—Situation in drug store by young man of good address, 25 years of age; have had nearly six years' experience; best of references regarding honesty and willingness to work for interest of proprietor; sober habits. Address "G. O. R.," Box 1344, Le Mars, Iowa.

JUNIOR DRUG CLERK, 10 years' experience, wishes position; experienced with fine trade; best references; city or country. Address H. A. M., care of this office.

#### BUSINESS OPPORTUNITIES.

RARE BARGAIN in a drug business; present proprietor has other business and must close out by April 1 or May 1; first class chance. Address Ferguson's Pharmacy, Cooperstown, N. Y.

FOR SALE.—Elegant drug store with large prescription and general trade on good corner in Chicago; low rent; only \$1,200 required; a positive snap. Address "Edwards," 7,001 Madison Avenue, Chicago, Ill.

CYANIDE OF POTASSIUM, (98 per cent.) K. C. N.), wanted to purchase in quantities; annual consumption about 100 tons; strength must be guaranteed; quotations and terms to be addressed to "Export," care of *Deutsch Amerikanische Abotheke Zeitung*, New York.—9.

FOR SALE.—Drug store doing a large prescription business on the principal business street of the most enterprising city on the Hudson River; invoice about \$2,300; rent \$24 per month; good reason for selling. Address "A. B. C.," care this office.—9.

TO DISSOLVE PARTNERSHIP.—The old established Buffalo Homeopathic Pharmacy is offered for sale; store is centrally located on Main street; object for selling, proprietors desire to devote their time to practice of medicine. Address Drs. McCrea & Buck, 362 Main street, Buffalo, N. Y.—11

TO ANY pharmacist desiring a perfect and simple process for making and repairing glass mirrors or silvering glass, I will send formula for same and full directions for one dollar; the process is simple and the chemicals are to be found in every drug store. Frank Edel, care of Huribut, Ward & Co., Des Moines, Ia.

FOR SALE.—A general store with a drug department; can be run by an unlicensed person; located in a growing town of 1,200 which is unaffected by hard times; average daily sales \$18; expenses light, profits good. Full particulars by addressing "Beans," care this office.—9.

FOR SALE.—Drug store in a Hudson River city of 26,000, doing an excellent prescription and family trade; invoice about \$2,000; rent \$15 per month; owner has two stores. Address "J. S.," care this office.—9.

BACK NUMBERS WANTED OF AMERICAN DRUGGIST, Vol. 18, No. 9, and PHARMACEUTICAL RECORD, Vol. 10, No. 7. Address, stating price, "Record," 37 College place, New York.

## LIQUID RENNET.

This article coagulates Milk without previous preparation, being most convenient for making

### JUNKET, or CURDS and WHEY.

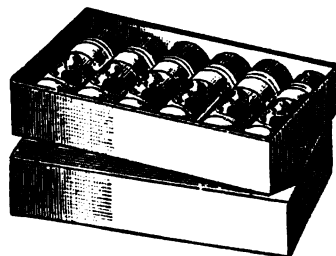
Made from Calves' Rennets by a formula that many years' experience has proved reliable, and believed to be the best and cheapest in the market. Sold by leading wholesale houses in Boston, New York, Chicago, and Philadelphia, and by the manufacturer

## JAMES T. SHINN,

DRUGGIST,  
Broad and Spruce Sta.,  
PHILADELPHIA.

## Ripans Tabules.

Ripans Tabules are compounded from a prescription widely used by the best medical authorities and are presented in a form that is becoming the fashion everywhere.



Ripans Tabules act gently but promptly upon the liver, stomach and intestines; cure dyspepsia, habitual constipation, offensive breath and headache. One tabule taken at the first symptom of indigestion, biliousness, dizziness, distress after eating, or depression of spirits, will surely and quickly remove the whole difficulty.

Ripans Tabules may be obtained of nearest druggist.

Ripans Tabules are easy to take, quick to act, and save many a doctor's bill.



# American Druggist and Pharmaceutical Record.

## A JOURNAL OF PRACTICAL PHARMACY.

Vol. XXIV. No. 10.

NEW YORK, MARCH 6, 1894.

Whole No. 289.

AMERICAN DRUGGIST PUBLISHING COMPANY,

37 College Place, New York.

A. R. ELLIOTT, President.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

Liberal Commissions to Club Agents.

It would in some respects be a wise and salutary provision if the pharmacist were required to keep a copy of the pharmacy laws and regulations in his own State and city in an accessible place in his store for the instruction of his clerks. Many young men changing from one State to another neglect to inform themselves fully of the laws of the State to which they move and thus are liable to transgress the laws and thus involve their em-

ployers in serious legal complications. Several cases of this kind have come under our own observation. They order this better in Russia, where a compilation of the pharmacy laws is required by law to be kept in each pharmacy.

### A QUEER PENNSYLVANIA DECISION.

FROM an esteemed correspondent in Pittsburgh we are in receipt of a communication in which he states fully the facts in the suit brought recently against a physician by the president of the State Pharmaceutical Examining Board of Pennsylvania, and commented upon editorially in a previous number of this journal (issue of March 1). It seems that Dr. C. N. VANSICKLE and his wife, M. E. VANSICKLE, who were the defendants, conducted a pharmacy in Oakland, Pa., known as Vansickle's Pharmacy. At Munhall, Pa., there is also a store under the name of M. E. VANSICKLE, with J. H. RISING, a registered pharmacist, as manager. The Board prosecuted C. N. VANSICKLE, but owing to the mysterious absence of witnesses, were unable to prove that he was the owner. The board at the same time made information against his wife with view of testing the point whether or not a person not holding a certificate from the Board can carry on the drug business by employing a registered pharmacist. Owing to an erratic judge this case was summarily disposed of. These cases will again be tried in the March term. In his charge the judge said: "I have often said in this court that the way to repeal a bad law is to enforce it. I have no use for laws which protect the public one-tenth and those engaged in the traffic nine-tenths. I believe the law is unconstitutional because it does not provide that examiners should have a knowledge of chemistry, and gives the appointing power an opportunity of appointing examiners who have no knowledge of chemistry. Nor does it provide that those examined should be examined in chemistry."

With regard to the first point, as to whether or not a person not holding a certificate from the Board can carry on the drug business in Pennsylvania by employing a registered pharmacist, it is the opinion of those competent to speak in these

matters that, under the amended act regulating the practice of pharmacy, sale of poisons, etc., in Pennsylvania, no one can be engaged as manager, nor be engaged in or interested in the business of pharmacy as owner, unless he obtains a certificate from the State Pharmaceutical Examining Board. This is not only plain from the reading of the act itself, but the proviso clearly states the legislative mind that "only the widow or legal representatives" of a deceased manager, who was a registered pharmacist, may carry on and continue the business.

Since the repeal in March, 1893, of the section of the Pharmacy Act which permitted graduates in medicine to carry on the retail drug business without proper qualification, determined by an examination in practical pharmacy, the law has been quite explicit as to the registration of all applicants for licenses to practice pharmacy in the State, and it is difficult to understand what has prompted this recent adverse ruling against the Board.

### TO REGULATE THE SALE OF PATENT MEDICINES.

THE SOUTHWORTH bill has made its appearance in the Legislature of the State of New York. This bill it will be remembered was introduced last year but was squelched in committee. An effort was made at that time to procure for it the indorsement of the New York Board of Trade and Transportation, but without avail. The scope of the proposed measure can be determined from the text of the first section, which is as follows:

SECTION 1. In addition to the powers now conferred by law upon the State Board of Health said Board is hereby empowered, and it shall be its duty, upon receiving a fee therefor of fifty dollars, to cause an examination and analysis to be made by a practical chemist of any drug, medicine or mixture of drugs, herbs or medicine commonly known as patent or proprietary medicines, and shall ascertain and determine whether the use of the same may or may not endanger the public health, and it shall not be lawful for any person or persons or corporation to sell or offer for sale any such drug, medicine or mixture not prescribed by a regular physician, unless the same shall have been so examined and approved and certified in writing as not dangerous to the public health by said Board of Health.

The bill is condemned on all sides by the wholesale drug trade of New York on account of its looseness of construction and the uncertainty of its requirements.

It is thought by many in the trade that the passage of the bill would create a bureau for blackmail, and it is hoped that it will be met with the combined opposition of members of both branches of the trade—wholesale and retail. This can be accomplished best by each member of the branches interested in writing an individual letter to the State Assemblyman and Senator from his own district and insisting upon their opposing the measure.

## Pharmaceutical Notes.

**Hyoscine Hydrobromate.**—An English physician has studied the clinical effects of this compound, working with a sample of undoubted purity, and finds that they differ little from those of atropine. He considers, however, that until more is known of the chemistry, pharmacology, and clinical effects of hyoscine, it can hardly be recommended as a safe hypnotic.

**Calcium Chloride as a Hæmostatic.**—The influence which calcium chloride exerts upon the coagulation of the blood as demonstrated by Wright has induced Dr. Saundby to test this substance clinically in cases of hæmorrhage. In a case of bleeding from the rectum, and also in a case of purpura hæmorrhagica, the results were very favorable. The dose of the chloride was up to 6 grains, and this was repeated every two to four hours.

**Poisoning from Vaseline.**—A company of the Forty-second French infantry while in garrison at a fort at Belfast were served one day with beef and green salad. This was followed by the illness of nearly all the soldiers, they being affected with headache, vomiting and stomach ache. On investigation it was shown (*Pharm. Qest.*) that the poisoning was due to so-called vaseline oil which had been issued to grease the guns with but which had been used in making the salad.

**The Poison of Influenza.**—The ptomaine extracted from the patient in cases of influenza is a white substance crystallizing in prismatic needles, soluble in water, and of a slightly alkaline reaction. It forms a hydrochlorate, a chloroplatinate, and a chloraurate, all crystalline. It gives a brownish precipitate with phosphotungstic acid, a yellowish with phosphomolybdic acid, a yellow with picric acid, and a red with tannic acid. The composition of this base is  $C_8H_5NO_4$ . It is poisonous, inducing a strong fever and death in eight hours. It is not met with in normal conditions.

**Tubercle Bacilli transmitted by Cigars.**—An interesting paper on the possible transmission of the tubercle bacillus by cigars has appeared in the current number of the *Centralblatt für Bakteriologie*. Dr. Kerez, in the preface to his experiments, points out that ample opportunity is given for the infection of cigars with tuberculous material, as so many of the people employed in tobacco manufactories are known to suffer from consumption. The manner in which the cigars may become infected is apparent when it is remembered that by force of habit and convenience the tobacco workers prefer to use their saliva for getting the leaves to adhere in cigar making, instead of the materials supplied to them for this purpose. In this way the tubercle bacillus is easily conveyed to the cigar. Dr. Kerez has, therefore, imitated in every detail on a small scale the manufacture of

cigars, using saliva containing tubercle bacilli for the moistening of the leaves. After being dried and packed away in boxes, cigars preserved for different lengths of time were carefully unrolled, the leaves washed with water, and the infusion inoculated into guinea pigs. In all cases where the infected cigars had only been kept for ten days, the animals treated with the tobacco infusion died of tuberculosis, but when the cigars were kept for longer periods the animals suffered no ill-effects, indicating that during this time the tubercle bacilla had either been destroyed or deprived of their virulent character. As long, therefore, remarks Dr. Kerez, as the cigars, presuming them to have been infected in the course of making, are kept for a sufficiently long time in the manufacturer's hands before distribution this possibility of spreading consumption may be ignored.

**Paramannane.**—A lengthy description of this new carbohydrate, extracted from the beans of *Coffea arabica*, has just appeared, by M. Gilson. It had been shown by the work of Schultze and others that the compounds which constitute the cellular membranes of the coffee bean yielded four different glucoses on hydrolysis—dextrose, galactose, mannose, and a pentose (either arabinose or xylose). These results did not, however, settle the number of separate carbohydrates existing in the plant. Gilson, therefore, set out with the intention of separating these in their original state, without hydrolyzing them. He has succeeded in preparing cellulose and paramannane from the bean in a perfectly pure state, and with crystalline structure. Cellulose, of course, will only yield dextrose by hydrolysis, and paramannane is distinguished by furnishing mannose under this treatment. The beans, in fine powder, are extracted with ether. After the fat is completely taken out the powder is digested several times with .25 per cent. solution of KOH, and then washed with distilled water, and afterward boiled with 2 per cent.  $H_2SO_4$  for five hours. The portion which does not dissolve with acid is treated for an hour with 3 per cent.  $NH_3$  at  $60^\circ C.$ , and then washed with water and alcohol, and then dried. The residue is dissolved in Schweizer's solution, and 20 parts of strong solution of ammonia are added. It is then allowed to stand and cool and is poured off from a slight deposit. A current of  $CO_2$  is now passed through the liquid, and the cellulose is precipitated by this, whereas the paramannane remains in solution. This solution is dried on a water bath, and is treated with a weak solution of hydrochloric acid to remove copper oxide. The solution is now filtered, leaving the carbohydrate on the paper, which is washed with distilled water and dried. It can be further purified, if necessary, by re-dissolving in Schweizer's solution and repeating this treatment. It is a white, light powder, very much like starch in appearance. Under the microscope it shows a crystalloid structure. It is insoluble in water and alkalies; easily soluble in Schweizer's solution and strong sulphuric acid. On hydrolysis by Flechsig's method it yields a sugar whose hydrazone melts at  $185^\circ$  and possessing the other properties of mannose. Elementary analysis gives the following results:

	Found.	Theory for $C_{11}H_{22}O_{11}$
C . . . . .	41.55	42.1
H . . . . .	6.52	6.44
O . . . . .	51.93	51.46

—*Journal de Pharmacie d'Anvers through B & C. D.*

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Mixture of Dry Chemicals to Produce a Liquid.**—C. E. R., Jr. writes: "Kindly inform me of any two (or more) dry chemicals other than chloral and camphor, which, through chemical affinity, produce a liquid when mixed."

We are not aware of the existence of any "dry chemicals" which will liquefy when brought in contact with each other. Salts containing notably large amounts of water of crystallization give up their water in presence of certain other salts; but these cannot be regarded as "dry chemicals." Mixtures of sodium sulphate with potassium citrate and zinc sulphate with lead acetate become moist and resolve themselves into a pasty mass but do not completely liquify. This action is due to the liberation of the water of the sulphates.

**Flavin.** W. H. R.—This is the yellow coloring principle of quercitron bark. It is obtained by boiling the bark repeatedly with solution of soda precipitating the mixed decoctions with dilute sulphuric acid and continuing the boiling. It is not the pure principle quercitrin, but a product of its partial decomposition.

**To Dye Eggs.** J. R. P.—Any of the aniline dyes dissolved in water may be used for dyeing eggs, no mordant being required. Buy your aniline dyes in bulk and put up in small packages to retail at 5c. or 10c. each. The dealers in egg dyes do not claim any special properties for their colors; any person is at liberty to retail aniline dyes of any shade in any quantity.

**Cream or Milk of Camphor.** J. E. P.—We have two formulas for preparations answering to the above names. The first was formerly advertised as "Camphor milk" and is composed of:

Pure oxide of zinc . . . . .	10 grammes
Spirit of camphor . . . . .	5 "
Rose water . . . . .	180 "

Cream of camphor is said to be a mixture of:

Powdered camphor . . . . .	1 part
Sugar . . . . .	80 parts
Almond emulsion . . . . .	420 parts

Mix the camphor and sugar intimately; add the almond emulsion gradually and triturate together.

**To Make Leather Waterproof.** L. P.—We are unable to place our hands on the formula you seek. The most recently devised method of waterproofing leather is that published in a recent number of a French contemporary as follows: Into a bottle partly full of benzine is placed as much paraffin wax in shavings as the liquid will dissolve. With this mixture the leather is saturated, the liquid finding its way into every pore of the article. The benzine quickly evaporates, leaving the paraffin behind it to render the leather both flexible and waterproof.

**Smokeless Powder.** "L. X."—This is produced in Krupp's great iron works by the following method: Prepared gun cotton (dinitro cellulose) is saturated with



nitro-glycerin in a vacuum at 6-8° C. and the excess of nitro-glycerin expressed, then warmed to 60-80° C. to cause it to become gelatinous, then 1-2 p. c. of diphenylamine which makes it more stable chemically, then pressed between warm plates the surfaces of which are furrowed to regulate the fineness of the powder.

**Friederichshall Water.**—A formula based on the analysis of Bauer-Struve is annexed. Of the ten salts the first seven are dissolved in a portion of water and filtered, then added to the fountain with most of the water for a 10 gallon charge, and then charged up to about 60 pounds. Meanwhile have the other three salts dissolved, filtered, and then add to the fountain, when the charging with carbonic acid may be completed:

Potassium sulphate.....	1.4 grains
Sodium bromide.....	2.0 grains
Ammonium chloride.....	5.2 grains
Sodium silicate.....	34.0 grains
Sodium carbonate.....	1182.0 grains
Sodium chloride.....	1047.0 grains
Sodium sulphate.....	18120.0 grains
Aluminum chloride.....	5.0 grains
Calcium chloride.....	749.0 grains
Magnesium chloride.....	5409.0 grains

**Lute.**—M. P. says: "I note a query from one of your subscribers for a luting for joints of pharmaceutical stills, and write to say that I would recommend strips of soft paper, covered with starch paste to which  $\frac{1}{2}$  of its weight of glycerin has been added."

This method of forming a lute for the joints of pharmaceutical stills is not in any sense a new one, having been published in this journal some years ago. It is best to apply the strips after the apparatus has already become somewhat warm. When it is desired to remove the strips they are cut in the direction of the joint and soaked off by means of hot water.

**To Deodorize Kerosene.**—J. A. C. writes: "Kindly inform me how paraffin oil may be rid of its unpleasant odor. I wish to make a hair restorative composed principally of this oil."

The oil may be distilled with quick lime or treated with sulphuric acid. The latter method is most commonly employed. Shake the oil in a clear glass-stoppered bottle with  $\frac{1}{4}$  its weight of commercial sulphuric acid. Repeat the shaking frequently during the day. Then set aside. On the next day draw off the clear oil from the colored acid and shake in another bottle with an equal volume of water containing  $\frac{1}{2}$  ounce of sodium carbonate (sal soda) to each quart.

Another method is to expose the oil in open vessels for 12 hours to a heat of 220° to 235° F., and then filter through freshly burnt bone-black. Then perfume, using the coarser and more pronounced flavors like oil of mirbane, citronella or verbena with musk, clove and cinnamon, in preference to the finer odors, which would be worthless.

**Isobutyl Alcohol.**—W. R. writes: "Kindly tell me what isobutyl alcohol is and method of manufacture?"

Isobutyl alcohol is the butyl alcohol of fermentation; it occurs in several fusel oils and especially in the spirit from potatoes. Chemically it is an alcohol derived from a hydrocarbon which does not present the normal form, i. e. contains carbon atoms which are directly united with more than two other carbon atoms, as its formula— $\text{CH}_3 - \text{C}(\text{CH}_3)_2 - \text{CH}_2\text{OH}$ —indicates. Here it will be observed the second carbon atom is directly united with three other carbon atoms.

**Bromine Water.**—R. S. W. writes: "Will you kindly send me a formula for preparing bromine water? I am unable to

find any except the National Formulary solution (Smith's), which is too strong."

Bromine water is best made according to the official standard, which provides for an aqueous solution of bromine prepared by dissolving 1 Cc. of bromine in enough water to make 100 Cc.

**Error in Pharmacopoeia.** H. H. F.—The amount of syrup of citric acid prescribed in the solution of citrate of magnesia of the new Pharmacopoeia is just double that which was intended. The error has already been pointed out by Prof. Oscar Oldberg, and the necessary corrections have been made in the plates of the Pharmacopoeia, so that the next reprint will show the corrections. The necessary correction should be made in the earlier issues of the Pharmacopoeia.

**Seiler's Solution.** F. P.—This is made according to the formula given below:

Sodii bicarb.....	3 i
Sodii bitor.....	3 i
Sodii benzoat.....	grs. iiss
Sodii salicyl.....	grs. iiss
Eucalyptol.....	grs. iij
Thymol.....	grs. iij
Menthol.....	gr. iij
Ol. gaultheria.....	gr. iij
Glycerin.....	℥ iiss
Alcohol.....	℥ iij
Aque q. s.....	℥ ii

Tablets after this formula are put up by the manufacturing chemists.

**Clemen's Solution of Bromide of Arsenic.**—Referring to a formula for this preparation which appeared in last week's issue of THE DRUGGIST AND RECORD J. K. requests us to reduce the parts by weight there given to apothecaries' weights, and to print instructions as to how to prepare the solution.

The following is a formula altered to meet our correspondent's wishes:

Arsenious acid.....	73 grains
Potassium carbonate.....	73 grains
Bromine.....	146 grains
Water enough to make.....	16 fl. ounces

Boil the arsenious acid with the carbonate of potassium and 10 fluid ounces of water until dissolved. When cold add enough water to make the volume up to 14 fluid ounces. Then add the bromine and make up with water to 16 fluid ounces. Agitate several times daily during a week; then set it aside until colorless, which will require several weeks, when it will be ready for use. Keep in a cool, dark place.

**Boehringer's Quinine Test.** F. J. W.—This test is employed for the detection of cinchonidine, cinchonine and quinine in quinine. The test is as follows:

Dissolve 2 Gm. of the crystallized sulphate of quinine in 60 Cc. of distilled water in a tared flask at a boiling temperature. Then add 0.5 Gm. of neutral crystallized oxalate of potassium dissolved in 5 Cc. of distilled water. Add enough water to make the contents of the flask weigh 67.5 Gm.

Next place the flask for half an hour into a water bath at 20° C. (68° F.) [having previously cooled the flask to this temperature], then filter and add to 10 Cc. of the filtrate two drops of U. S. P. solution of soda.

If a turbidity or a precipitate makes its appearance, the salt contains 1 per cent or more of cinchonidine. The oxalate of potassium suitable for this test is prepared by neutralizing pure oxalic acid in aqueous solution with pure potassa so that the liquid has only a faintly alkaline reaction. The solution is concentrated, allowed to crystallize, and the crystals dried with the aid of heat.

**Gelatin Capping for Bottles.** W. J. Q.—The following is the method of capping bottles usually employed:

Gelatin, 7 pounds; glycerin, 10 ounces; water, 4 pounds, are after some soaking

heated in a water bath until solution is secured; then color with any water soluble aniline. The bottles have their necks dipped into this warm fluid solution, and it quickly sets when taken on the cool glass surface.

**Boonekamp Bitters.** S. P.—The formula printed below is believed to furnish a very satisfactory preparation:

Socotrine aloes.....	8 ounces
Myrrh.....	4 ounces
Galangal.....	4 ounces
Saffron.....	4 ounces
Clove.....	1 ounce
Absinthe.....	1 ounce
Gentian.....	4 ounces
Rhubarb.....	4 ounces
Turmeric.....	4 ounces
Larchagaric.....	8 ounces
Cinnamon.....	$\frac{1}{2}$ ounce
Fennel.....	16 ounces
Alcohol.....	12 pints
Water.....	6 pints

In the alcohol, before it is mixed with the water, dissolve:

Oil of absinthe.....	90 min.
Oil of fennel.....	90 min.
Oil of curled mint.....	90 min.

**Bromo Chloralum.** C. L. K.—In reply to your query we give the following formula:

Alum, in coarse powder.....	2 pounds
Boiling water.....	4 pints
Water of ammonia.....	q. s.
Hydrochloric acid.....	q. s.
Bromine.....	1 oz.
Water.....	q. s.

Dissolve the alum in the boiling water. Add 5 gallons of cold water, and mix well; then precipitate with water of ammonia until a slight excess of free ammonia is present in the liquid. Allow to settle: pour off the supernatant solution of sulphates of ammonium, etc., and wash the precipitate twice with cold water by decantation. Then transfer the precipitate to a muslin strainer, allow to drain, transfer to a suitable vessel, add the bromine, and cover it airtight. Afterward add enough hydrochloric acid, in small quantities at a time, to dissolve the precipitate, and then enough water to make the product measure one gallon. Finally filter.

**Lydia Pinkham's Compound.** J. R. W.—Will some reader who knows kindly furnish a formula for this preparation?

## Correspondence.

### Galen, Jr.'s Cough Mixture.

Editor AMERICAN DRUGGIST:

You are both wrong, you when you say that the mixture contains over  $\frac{1}{4}$  grain of morphine, and the gentleman from Niles, Mich., when he undertakes to set you right.

The truth of the matter is each teaspoonful (one drachm) of the mixture contains about  $\frac{1}{4}$  grain of morphine, the difference between this fraction and the one fixed upon by the gentleman referred to being made up by the acetic radical and the two extra molecules of water of crystallization. LEMUEL CHAISELY, Ph.G.

BLUE WING, N. J., March 3, 1894.

### "The Ideal Druggists' Journal."

Enclosed please find check for one year's subscription to THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD which I certainly regard as the ideal druggists' journal.—Robert W. Beck, Sharpsville, Pa.

### FOR TOOTHACHE.

[Journal de Pharmacie.]

Dry alcoholic extract opium {	.....	25 c. 50
Camphor.....	{	.....
Balsam Peru {	.....	25 c. 00
Mastic.....	{	.....
Chloroform.....		10 c.

## News and Notes.

### Interstate Retail Druggists' League.

The regular fortnightly meeting of the New York City branch of the League took place in the Mott Memorial Hall, 64 Madison avenue, on Friday, March 2, at 8 P.M. Chas. A. Osmun presided. He opened the proceedings by declaring the secretary's office vacant and offering in nomination for the office the name of Thomas O. Morrison, 262 Eighth avenue. The president's motion was promptly seconded by M. F. Bender, and a further motion to declare the election unanimous was instantly carried. Mr. Morrison was escorted to his seat amid the applause of the members.

The report of the Executive Committee was then presented by President Osmun and ordered read. The report consisted of a proposed Constitution and By-laws of the New York City branch of the League, the text of which is as follows:

#### INTERSTATE RETAIL DRUGGISTS' LEAGUE.

##### NEW YORK CITY BRANCH.

##### CONSTITUTION AND BY-LAWS.

##### Preamble.

The members of this Association declare its object to be advancement of the mutual interests of its members.

##### ARTICLE I.

SECTION 1. This Association shall be known as The New York City Branch of the Interstate Retail Druggists' League.

SEC. 2. The officers of this Association shall consist of a President, Vice-President, Secretary, Treasurer, and three directors, who shall constitute the Executive Committee.

SEC. 3. The Secretary and Treasurer shall make a report at each regular meeting.

SEC. 4. Any retail druggist recommended by the Executive Committee may become a member of this Association by the payment of two dollars and signing the Constitution and By-laws.

SEC. 5. No amendment of the Constitution or By-laws shall be made except upon written notice, by any member at a regular meeting of the Association, to remain upon the table until the next regular meeting, and then the amendment may be adopted by a vote of two-thirds of the members present.

##### BY-LAWS.

##### ARTICLE I.

SECTION 1. The regular meetings of this Association shall be held on the first and third Fridays of each month at 3 P.M. Special meetings may be called by the President and Secretary and shall be called on the written request of ten members.

SEC. 2. Ten members shall constitute a quorum.

SEC. 3. All questions of parliamentary law shall be decided according to Cushing's Manual.

##### ARTICLE II.

SECTION 1. The first regular meeting in June shall constitute the annual meeting for the election of officers.

SEC. 2. The officers of this association shall be elected by ballot. At the last meeting in May a Nominating Committee composed of five members shall be chosen by the house; they to report at the annual meeting in June. Nothing in this section shall be construed as forbidding nominations from the floor of the house at the annual meeting.

SEC. 3. No member shall be allowed to vote who is indebted to the Association for more than one year's dues.

SEC. 4. Before proceeding to ballot there shall be appointed by the presiding officer as tellers three members who shall not be officers, or candidates, and whose duty it shall be to receive and count the votes and report the result at once to the chairman of the committee.

SEC. 5. The newly elected officers shall enter upon the discharge of their duties on the day of the next regular meeting after the annual meeting.

SEC. 6. In case of the death, resignation, protracted inability, or neglect to perform his duties, of any officer or director, the Executive Committee may report his name to any regular or to a special meeting of the Association, when his place may be declared vacant.

In case of a vacancy to any office other than that of President, a successor to fill the office until the next annual election shall be appointed by the President. In case of a vacancy in the office of President the duties of this office shall be performed by the Vice-President.

##### ARTICLE III.

SEC. 1. It shall be the duty of the President, or in his absence the Vice-President, or, in his absence, of a chairman to be appointed *pro tempore*, to preside at all meetings of the Association, and in case of an equal division to have a casting vote.

SEC. 2. It shall be the duty of the treasurer to collect and take charge of all moneys belonging to the Association. He shall also render annually at the end of the Association year a complete account of the condition of the finances, embracing the items of receipts and expenditures for the preceding fiscal year, and he shall not be relieved from responsibility until such reports are rendered and approved.

SEC. 3. The Secretary shall keep accurate minutes of the meeting of the Association, and note the members present; he shall also keep a roll of the members and give them at least two days' notice of the time and place of meeting; he shall furnish to all committees a notice of their appointment; he shall notify all new members of their election, furnish them with a copy of the Constitution and By-laws, receive their signature to the same, and report to the Association at the next regular meeting.

SEC. 4. The Executive Committee shall have full power to conduct the affairs of the Association pertaining to its finances as well as to the general objects for which it was founded.

SEC. 5. No officer, director or member of the Association shall at any time incur any expense or liability on its behalf not authorized at a meeting of the Association or Executive Committee.

##### ARTICLE IV.

SECTION 1. The order of business of the meetings of the Association shall be as follows:

1. Calling of the roll of members.
2. Minutes of the preceding meeting.
3. Minutes of the Executive Committee.
4. Reports of standing committees.
5. Reports of special committees.
6. Election of officers (at the annual meeting), appointment of Nominating Committee (at meeting next preceding the annual meeting).
7. Communications.
8. Resolutions.
9. Incidental and unfinished business.

##### ARTICLE V.

SECTION 1. After an official notice of election has been given to a member elect the latter must sign the By-laws and make his first payment of dues within one month. In case of his failure to do so his election shall be void, and if a second application is made it must be acted upon anew by the Executive Committee.

At the time of signing the By-laws he shall pay into the hands of the Treasurer the sum of two dollars, his first annual dues. He shall continue to pay an annual fee of two dollars as long as he continues to be a member.

President Osmun asked the pleasure of the members with regard to the report, and it was resolved to adopt the report as a whole.

Victor Kostka suggested a new name for the association, "The New York County Apothecaries' Association." He said in explanation that adopting a distinct name for the branch would not establish a precedent as many other branches throughout the country were named independent of the League and their present title was a trifle lengthy.

President Osmun said he did not think it would be good policy to make any change in the name of the association and expressed himself as being opposed to the suggestion. Mr. Kostka thereupon withdrew his motion and the matter was dropped.

After passing a unanimous vote of thanks to President Osmun for his labors in connection with the drafting of the constitution and by-laws of the association, the members discussed the advisability of leasing the Mott Memorial Hall as a permanent meeting place. Mr. Osmun was in favor of engaging the hall until the time of next annual meeting of the association, and a motion to this effect was made accordingly and carried.

The president then called upon all present who had names to propose for membership to come forward, and several of those responded. Every member of the local branch is now a committee of membership for the district in which his pharmacy is located. Oscar Kress, whose territory ranges from 50th to 59th streets on Sixth and Tenth avenues, presented a large list of new members who had agreed to subscribe to the Detroit plan. M. F. Bender of 357 W. 14th street also

handed in the names of a number of new applicants for membership.

The next meeting of the branch will take place at Mott Memorial Hall on Friday, March 16, at 8 P. M.

### Patent Medicine Legislation in Massachusetts.

The committee on public health recently gave a hearing to petitioners for a bill regulating the sale of patent medicines. Representative McInerney of Boston, who introduced the bill, appeared for the petitioner. He stated that the objection was not so much against the use of the alcohol in the medicines, but he wanted the percentage of alcohol distinctly specified on the package or bottle. The provisions of the bill require that this be done. A failure to comply renders the offender liable to a fine of \$50 for each offense.

William W. Bartlett, Ph.G., was present, and his opinion of the measure was desired by the committee, and as he was unaware that a penalty was attached to the bill he stated that personally he had no objection to the proposed act. Dr. Bennett F. Davenport, formerly of the State board of health, was rather neutral in his position on the matter. He told of certain medicines in which a great amount of alcohol had been found. He would not seriously object to the bill or one tending in the same direction.

Fred L. Carter of Carter, Carter & Kilham had strong objections. "You have no right to make a druggist tell what his formula is. The amount of alcohol is decidedly a part of the formula," he contended.

E. Waldo Cutler of Cutler Bros., C. P. Jones and Representative C. F. Crane, a Somerville druggist, remonstrated, and the hearing was closed.

Mr. Carter subsequently stated that he considered the measure a menace to the drug trade of this State, that the manufacturers would never comply with its provisions, and the result would be a loss to both wholesale and retail business. This is supposed to be a temperance measure, but its advocates would soon discover, if it becomes a law, that they had not accomplished their purpose. Placing the per cent. of alcohol upon preparations containing that substance would be a notification to a certain portion of the community that it could be used to intoxicate. Those who doubt this should recall the alarming increase in the number of "Jamaica ginger drunks" which has sprung up since Henry Faxon of Quincy commenced his tirades upon essence of ginger. Mr. Faxon's crusade amounted to this: he informed people that it was possible to get drunk with this preparation, and he built up thereby an excellent business for grocers in this product.

### Changes in the Tariff Bill in the Senate Committee.

The United States Senate sub-committee on the tariff have made many changes in the bill which was passed by the House of Representatives.

The changes made by the sub-committee are very numerous, and begin with the date when the law is to go into effect, which is made June 30, 1894, instead of June 1, and following on through all the schedules, commencing with the first item in schedule A—chemicals, oils and paints—and running clear through to the free list.

The changes from the original bill in articles in which druggists are interested are as follows:

Acetic, boracic and tartaric acid reduced from 20 to 10 per cent.

Glycerin, crude and purified, changed from 1 and 3 cents per pound, respectively, to 20 per cent. ad valorem.

Iodoform changed from \$1 per pound to 25 per cent. ad valorem.

Licorice changed from 5 cents per pound to 25 per cent. ad valorem.

Magnesia changed from 3 cents and 7 cents per pound to 30 per cent. ad valorem.

Castor oil reduced from 35 to 30 cents a gallon.

Flaxseed and poppyseed oil, taxed in the Wilson bill 15 cents a gallon, are put on the free list.

Hemp and rapeseed oil reduced from 20 cents a gallon to 10 cents.

Olive oil changed from 35 cents a gallon to 25 per cent. ad valorem.

Peppermint oil reduced from 25 to 20 per cent. ad valorem.

Seal and other fish oil reduced from 25 to 20 per cent. ad valorem, and cod oil from 15 to 10 per cent. ad valorem.

All lead products included in paragraphs 49, 50, 51 and 52, which include acetate of lead, white lead, nitrate of lead and orange mineral, which, in the Wilson bill, are taxed 1½ to 1¾ cents a pound, are placed on the free list.

Castile soap reduced from 35 to 30 per cent. ad valorem.

Bicarbonate of soda changed from half a cent a pound to 30 per cent. ad valorem.

All cylinder and crown glass, which in the Wilson bill were taxed from 1½ of a cent per pound up to 20 cents per square foot in the case of polished glass, are made dutiable, whether polished or unpolished, at a uniform rate of 30 per cent., as also are all the manufactures of glass included in paragraphs 93, 94, and 95, which include plate glass of every kind, rough or finished, silvered or unsilvered.

Spectacles, opera glasses and optical instruments are reduced from 35 to 30 per cent. ad valorem, as are pebble or glass lenses.

Zinc in all its forms, taxed 15, 20 and 25 per cent. ad valorem, is placed on the free list.

Honey is taxed 10 cents per gallon; hops are taxed 8 cents per pound; and castor beans, taxed 25 cents per bushel, are all taxed in the amended bill at the uniform rate of 20 per cent. ad valorem.

Chocolate is changed from 5 cents per pound to 10 per cent. ad valorem.

Cocoa is changed from 2 cents per pound to 5 per cent. ad valorem, and cocoa butter from 3½ cents per pound to 15 per cent. ad valorem.

Starch and dextrine are changed from 1 cent a pound to 30 per cent. ad valorem.

Mustard is changed from 10 cents per pound to 25 per cent. ad valorem.

Spices and red pepper, taxed in the Wilson bill at from 1 to 3 cents per pound, are changed to 30 per cent. ad valorem.

Vinegar is changed from 7½ cents per gallon to 20 per cent. ad valorem.

Distilled spirits entering into the composition of any preparation are to be taxed at the rate of \$1.50 per proof gallon.

The tax on brandy is changed from \$1.20 to \$1.50 per proof gallon.

All cordials and liquors are changed from \$1.20 to \$1.50 per proof gallon.

The income tax provision was left untouched by the sub-committee, who are in favor of it, and was not acted upon by the full Democratic committee. Neither was any final decision reached as to the whisky tax.

The date for the bill to go into operation was set as June 1 by the House, but this has been changed by the committee to June 30.

### Southern Wholesale Druggists' Association and the Alcohol Tax.

The Southern Wholesale Druggists' Association brought their annual meeting to a close in Memphis, Tenn., by adopting the following resolution with regard to the proposed new tax on alcohol:

"Resolved, That this association endeavor to demonstrate to the United States Senate that the increased tax on alcohol, as now provided for by the wisdom of the bill as passed by the House, placing a duty of \$1 per proof gallon on this item, will prove a serious additional expenditure in the production of pharmaceutical and chemical preparations, and it is an onerous charge on the wholesale and retail druggists, as well as manufacturing pharmacists and chemists; and that the United States Senate be urged to return the bill on the basis of 90 cents on the proof gallon, as ruling heretofore.

"Resolved, That the individual members of this association be requested to communicate with their Senators and the various Congressmen of their several States toward attaining the result, protesting, both in their individual capacity and as firms, against the measure. Be it further

"Resolved, That the members of this association be requested to obtain the assistance of the State Pharmaceutical Association of their respective States toward taking similar action."

### Gotham Gossip.

Fred Doty, who is widely known in drug circles as head of the Atlas Rubber Co., New York, has been confined to his home for several days with a severe attack of pneumonia.

Seabury & Johnson's team lost on last Saturday to both the McKesson and Robbins and Parke, Davis & Co. teams. The scores were: Seabury & Johnson, 503, vs. McKesson & Robins, 642; and Seabury & Johnson, 509, vs. Parke, Davis Co., 659.

Part of the daily duty of one of the girls in a dairy "restaurant" in New York consists in removing from the under side of the edges of the tables the chewing gum which has been stuck there by customers. It takes the girl a full hour to accomplish this every morning, and she has to work hard and exercise considerable strength, as the chewing gum hardens and sticks tenaciously to the tables. She removes it with a knife. In any of the cheaper grade of restaurants the tables are decorated on their under sides in the same way. It is the men who practise this peculiar habit, and it goes to show how many of them use chewing gum.

E. L. Fendler, the well-known Broadway pharmacist, has been figuring in the New York World to the extent of over half a column. Mr. Fendler boasts of unusual strength in the muscles of his hands and arms and, it seems, challenged Sandow, the "strongest man on earth," to a test of strength known as "putting down the arm." This test is said to be centuries old and Mr. Fendler, who is a slight man physically, came out victorious. The performance of this feat has attracted considerable attention and has been the means of giving Mr. Fendler considerable newspaper celebrity. Mr. Fendler's picture appears in connection with the article.

A party of druggists occupied two of the boxes at the Casino on the evening of March 1, and a more genial party it would be difficult to find. C. Graham Bacon of C. G. Bacon & Co. was the host of the evening, the party dining first at the Imperial Hotel and then adjourning to the Casino. The toastmaster at the dinner was Mr. Vanderloef of J. L. Hopkins & Co., and the many friends of "Van" in the trade know that to be a guaranty for the jollity and good fellowship of the evening. Mr. Bacon's other guests were "Jack" Stead, H. Jarrett, C. G. Euler, C. C. Humann, T. S. R. Loud, Chas. Weiss, Mr. Young of Thurston & Boraisch, and Chas. E. Lovett.

### Connecticut Notes.

Chas. A. Rapelye, the retiring member of the Connecticut Board of Pharmacy, has refused to accept a very flattering and unanimous renomination to, office giving as his reason that he could no longer spare the time necessary for a proper performance of the duties of the position.

It may not be generally known that the pay of a pharmacy commissioner is very small, only about \$300 a year. The insignificance of this amount it is apparent to all will always be a bar to securing representative men.

Mr. Rapelye, upon being questioned regarding board examinations in Connecticut, stated to your correspondent that the majority of candidates failed in materia medica and chemistry. In pharmacy there are always a good many guess answers, though some of the answers are occasionally verbatim quotations from the text books and the various quiz com-

pounds. I suggested that it was, in the opinion of some people, unfair of the commissioner to ask questions on the new pharmacopoeia so soon; and hinted that a book which took so long to compile should be given a reasonable time to be studied in. Mr. Rapelye said he did not think so. Any way he put more faith in the actual knowledge of the applicant as shown by him in the actual work of the examination, and thought that the only correct form of examination. The examination on the new U. S. Pharmacopoeia will not be held until April.

I have interviewed a number of Connecticut druggists as to the state of trade throughout the State, and it was reported of the factory towns and cities that trade was very dull; the dullness not affecting Hartford and New Haven so badly.

The practice of physicians dispensing their own remedies is attracting attention at present. It is stated that it is getting to be the rule for the physicians to carry almost all of the principal formulæ in the tablet line. When a patient goes to the office of a physician his prescription is written and filled there, to the detriment of the druggist. As yet there seems to be no relief from this growing evil; it is only one more of the growing perplexities of the druggist.

Of the many flattering remarks made at the banquet of the Connecticut Pharmaceutical Association perhaps those by Dr. Cook, in his toast "Our Medical Friends," touched the practical druggists in about the right spot. Among other things he said the doctor was almost pestered to death with the traveling representatives of the great manufacturing houses, who are constantly leaving samples and are always anxious to explain "something new." This, of course, works to the great disadvantage of druggists, who are compelled to order a little to satisfy the demand, and after selling a few ounces out of a bottle are left with the remainder. Dr. Cook said he voiced the general profession when he said the doctor would be glad when the druggist himself put up some of the more popular specialties, as the physician could then be sure of patronizing home industry.

### Boston.

Prof. Markoe has been on the sick list but has been meeting his losses regularly.

James S. Dudley, Boylston street, corner Park square, was in New York last week.

At the last meeting of the M. C. P., Trustees F. I. Hopkins, of Lynn, and C. E. Eames, 396 Hanover street, this city, became life members.

Arthur Chesley, the Roslindale eloper, has turned up in the Provinces with his paramour. He left numerous small bills behind, and it is said that West & Jenney mourn his departure to the extent of \$100.

Last week was a busy one for the Massachusetts Board of Pharmacy. They held a three days' session, during which they examined 85 applicants. Certificates were granted to the following successful candidates:

William J. Heebner, Lee; Gorham N. Winslow, Peabody; Andrew F. Fearns, Exeter, N. H.; Felix J. MacCarthy, Boston; Honorius J. Sorel, Fall River; Thomas D. Driscoll, Quincy; Joseph R. Godder, Medford; William T. Welden, Boston.

A college pin is the latest innovation at the Massachusetts College of Pharmacy. This is the outcome of repeated conferences between the officers of the senior and

junior classes. It only needed the seal of approval from the trustees to make the movement a certainty, and this was granted at the last regular meeting of that body. The design adopted seems to be excellent and the college colors are shown to good advantage.

The wealth of the Back Bay seems to offer allurements for druggists which are not easily withstood, and it seems to be an established fact that this fashionable quarter is soon to have "another new store." It is said that this new establishment will be located at the corner of Boylston street and W. Chester park, and it is to be presided over by A. P. Watson & Co. Mr. Watson was formerly a clerk with Kelley & Durkee.

Theo. F. Rice & Co., 1005 Washington street, have been making a display of tincture of ginger ("extract" so-called) in one of their windows which is worthy of notice. Two large packed percolators to which were attached a reservoir containing the menstruum, and a ten gallon keg to receive the finished product gave the display a tinge of realism and served to attract the notice of passersby. A neatly printed card conveyed information to the public as to the nature of the exhibit.

The tenth anniversary of the Paint and Oil Club was celebrated by a dinner at Young's Hotel on the afternoon of Feb. 10, which was attended by about 70 members and guests. President McClellan was in the chair, and before introducing the speakers he gave a short history of the organization, during which he stated that the 36 firms which comprised the club at its formation, had now increased to 107. The guests and speakers were Gov. Greenhalge, Rev. Leighton Parks, J. Seaver Page, of New York, and George L. Gould, who read an original poem.

February 7 was the last day for the introduction of new business into the legislature. A decided novelty in the way of proposed legislation is the bill introduced by Representative Bliss, of West Springfield, which affects the patent medicine trade. It imposes a penalty of \$500 on any one who shall paint on any house, barn, mill, shed, or other building, patent medicine or other advertising sign, the letters, numbers, figures or characters of which are in length more than six inches, or in breadth more than four inches. The act is not to apply in cases where the sign or advertisement is upon a building which is being otherwise used in the business which is being thus advertised.

#### Boards and Associations.

**MILWAUKEE DRUG CLERKS' ASSOCIATION.**—At a meeting of the Milwaukee Drug Clerks' Association, held on February 24, officers were elected as follows: President, H. F. Weber; vice-presidents, J. A. Block and M. E. Tray; secretaries, E. Meinecke, A. J. Luebke; treasurer, Rudolf Best; censor, C. S. Wassweyler, assistant censor, Caspar Henni; librarian, M. A. Kleinhaus.

**THE PHILADELPHIA ALUMNI** have issued a circular appeal to the alumni of the college requesting contributions toward the installation of an electric light plant in the new college building. The committee in charge of the matter consist of W. Nelson Stern, Edward C. Jones, Joseph W. England, C. Carroll Meyer and Wm. L. Cliffe. Contributions should be addressed to the chairman, W. Nelson Stern, 2000 Callowhill street, Philadelphia.

**THE NEBRASKA BOARD OF EXAMINERS** met at Lincoln, February 14, for the examination of applicants for registration. A resolution was adopted requiring a

marking in each topic of forty-five or more, with the general average of seventy unchanged. The following persons were admitted to practice pharmacy, having passed an average of seventy or more, as required by the board: Chas. Allen, Lincoln; Chas. W. Anibal, Edgar; Frank Dofoe, Tecumseh; W. P. Dinsley, Lincoln; D. C. Flanagan, Craig; James I. Green, Curtis; Rudolph Gabler, Columbus; P. S. Holtzinger, Nebraska City; Wm. F. Waggoner, Beatrice; Loran G. Jordan, Elm Creek; C. A. Kaufman, Aurora; G. S. Flory, Pawnee City; J. S. Richmond, Ainsworth; W. D. Simmons, Beatrice; L. A. Tyson, Elmwood; H. M. Wills, Unadilla; O. S. Ward, Lincoln, and W. E. Paxton, Curtis.

Out of a class of twenty-four eighteen were granted certificates. Nebraska law requires examination in every case, though graduates or licentiates in pharmacy may be granted temporary certificates, good only until the next meeting of the board.

The next meeting for examination will be held at Norfolk, May 9. An adjourned meeting will also be held at Hastings, June 5, at which time the Nebraska State Pharmaceutical Association will hold a four days' session. For further information address the secretary, M. E. Shultz, Beatrice.

**ILLINOIS BOARD OF PHARMACY.**—At the practical examination of the State board of pharmacy, Illinois, held in Chicago, February 13, 14, and 15, the following passed a satisfactory examination as licentiates in pharmacy, and were registered pharmacists by examination: J. Adams, R. W. Allen, E. H. Allen, B. W. Baker, J. W. Chladek, Jr., M. A. Cohn, R. S. Collins, E. Van Delden, M. A. Dubois, I. N. Empie, P. Erb, C. P. Gieraltowski, F. W. Gregory, W. J. Hamilton, C. R. Hoffman, B. Johnston, C. G. Knight, V. T. Lewis, W. T. Liddell, H. E. Lindblade, M. McAnany, H. C. McWilliams, P. A. Nystrom, R. Reuter, L. Roettig, E. F. Rossmann, S. Rubenstein, F. Rudnick, F. Seward, W. W. Sherman, C. A. Soule, F. M. Thorn, F. Windmueller, W. T. Winters, E. C. Zobel of Chicago; R. T. Abernethy, Sumner; S. C. Davis, Morton; F. I. Ellis, Highland Park; C. P. Gunther, Freeport; H. Russell, Hebron; and J. Ulrich, Peoria. The following passed a satisfactory examination as assistant pharmacists and were so registered: G. Bollinger, J. F. Brennan, J. M. Callender, K. S. Chudzinski, T. Cupid, Jr., G. H. Cushman, D. Flavin, K. R. Forston, P. P. Hauber, W. F. Hiller, P. Johannes, W. H. Kelly, D. Landau, L. Lowenthal, L. Mrazek, D. F. McNab, M. B. McSherry, A. A. Rowland, H. J. Schulte of Chicago, and C. A. Dollinger, Wheaton. Twelve failed to pass a satisfactory examination. The next meeting of the board for examination will be held April 10, 1894, at No. 173, 39th street, Chicago. For further information address Frank Fleury, secretary, Springfield, Ill.

#### Trade Notes.

Clark's "Capillusia" for the hair is a seller of the readiest kind. Pharmacists who wish to add a specialty of this kind to their general stock should write for a supply to A. M. Clark, 136 Liberty street, New York. There is profit in it.

A letter of inquiry directed to Wm. H. Einhaus, 22 Maiden Lane, New York, inclosing a stamp, will bring an interesting catalogue and list devoted to aluminum novelties. These include tooth brush holders, soap boxes, picture frames and many other aluminum articles handled by druggists.

C. N. Crittenton & Co., 115 Fulton street, New York, are agents for all of the standard proprietary medicines, and when you are unable to procure some specialty from your jobber, just write to Crittenton & Co. They will supply it. Crittenton & Co.'s catalogue and price list is one of the best indexes of patent medicines extant. Write to them for a copy mentioning this journal.

Talcott, Frisbie & Co., wholesale druggists, Hartford, Conn., are introducing a neat package of "Household Soluble Blue." It is put up in pasteboard boxes to retail 5c. and is altogether a neat and cleanly method of handling bluing. The firm is introducing a number of striking novelties this season. As an advertising circular they are distributing neat strips of chamois leather on which are printed advertisements of the chamois skins handled by the firm. Druggists will find it to their advantage to write to Talcott, Frisbie & Co. when needing chamois. Sample kips are sent on approval.

Every druggist who follows business methods in the management of his store will be interested in the "Boston" Petty Ledger, a binder and index for bills, which is sold to the trade by A. G. Moore & Co., 47 Court street, Boston. The ledger is said to be the handiest and most useful of any of the ledgers now in use and is certainly arranged for most convenient reference. The alphabetical index enables the user to see at a glance the bill of any customer, and when paid the bill can be easily removed, a duplicate remaining in the ledger. It will be to your interest to procure one of these handy ledgers, which will be sent postpaid on receipt of price, \$3, to A. G. Moore & Co., 47 Court street, Boston.

The old established and reputable firm of Henry Thayer & Co., Cambridgeport, Mass., have produced in excellent combination a liquid bearing the name Thymozone. This is an antiseptic solution designed for both internal and external treatment which exhibits all of the antiseptic, prophylactic and detergent properties of its constituents—Eucalyptus Glob., Thymus Vulg., Pinus Sylvestris, and benzoic, boric and salicylic acids. It is a compound which druggists can recommend to the medical profession with every confidence, being fragrant, colorless, non-irritating, and a liquid which is miscible with water in all proportions. A sample of Thymozone will be sent to any reader of this journal who makes request to Henry Thayer & Co., Cambridgeport, Mass.

#### Effervescent Granules.



The accompanying cut conveys a fair idea of the handsome style of package adopted for Armstrong's Effervescent Granules. These preparations are of superior quality to most of the effervescent compounds of the market, being pure and of extreme solubility. There is good profit in handling them, and druggists will make no mistake in ordering a sample lot. A price list giving full particulars of the different preparations will be sent on request to any druggist mentioning this paper.



## Finé Confectionery for Pharmacists.

Druggists who keep fine confectionery and who cater to customers of the better class (and what pharmacist doesn't?) will consult their own interests by sending for a catalogue and price list of the Walter M. Lowney Co., Boston and Chicago. The putting in of a stock of Lowney's chocolate bon-bons should follow. These choice confections are sold in  $\frac{1}{4}$  lb., 1 lb. and 2 lb. sealed souvenir packages, suitable for the fine drug trade. They took the highest award at the World's Fair.

## NOTES ON PRICES.

### CHEMICALS.

In the monthly price lists of Rosengarten & Sons and Powers & Weightman, manufacturing chemists, Philadelphia, advances are noted in the following articles: Aqua ammonia of the different grades, bismuth salicylate, cocaine hydrochlorate, codeine, muriate, phosphate, sulphate and valerianate; extract of opium, morphine, acetate, muriate, and sulphate; opium. The following goods are marked lower: Acetone, lithium salts, lunar caustic, and silver nitrate.

### The English Chemical Market.

In the weekly price list of S. W. Royse & Co., exporters of chemicals, minerals and metals, Manchester, issued under date of February 24, the consumption of chemicals is referred to as good, with a moderate export demand. The alkali branch is brisk, bleaching powder moving well, especially in hardwood casks for export; and caustic soda has also a good inquiry at steady prices. Soda ash is unchanged in value, ammonia soda being in rather better demand for present delivery; soda crystals, however, are dull, and bicarbonate of soda has only a small inquiry. Chlorate of potash is firm on spot, but continues to be quoted lower for forward delivery. Affairs in the tar products branch are, however, disappointing. Benzoles are weak, and there is little business passing. Pitch also is rather neglected at present and prices are on the easy side. Creosote, though quiet, is steady, as sellers are still behind with deliveries on contracts. Solvent naphtha maintains its value well, but sales latterly have been unimportant. In crude carbolic the position is unaltered; prices are maintained by makers, but little is being sold; buyers prefer to hold off, as there is little outlet for crystal carbolic at present values. Sulphate of ammonia is dull, the Continental demand being small, but expected to improve, and makers are not anxious about selling forward at present figures. Muriate of ammonia is somewhat more plentiful. Carbonate of ammonia has just been advanced  $\frac{1}{4}$ d. per lb. In acetates of lime there is a lull, and prices are a shade easier; advices from America, however, report that considerable sales have been made for delivery over next few months. There is no change in acetates of lead. Acetate of soda is still dull, but there is more disposition to consider about buying, as prices have now reached a very low point. Carbonate and caustic potash are quite firm and in good demand. Prussiate of potash is steady. Sulphate of copper has been ruling quiet, but is now improving somewhat. Green copperas is still too plentiful. Oxalic acid is firm at convention price, but small re-sale lots are obtainable at a discount off makers' figures.

## Review of the Wholesale Market.

NEW YORK, March 7, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The wholesale trade in drugs, dyestuffs and chemicals during the past week has been of fair average proportions, and the new month has opened with a satisfactory distribution of full packages. The indications for spring are regarded as favorable, an appreciation on the low current values now prevailing being confidently looked for. Prices are quoted firm as a rule and revisions in the list are few. The more important changes are noted below as follows:

ADVANCED.	DECLINED.
Acetanilid.	Arnica flowers.
American saffron.	Cumin seed.
Cocaine.	Oil spearmint.
Cod-liver oil.	Oil tansy.
Balsam peru.	Oil bergamot, Sanderson's.
Coriander seed.	Oil peppermint.
Sal ammoniac, German.	Prussiate of potash.
St. Ignatius beans.	Mercurials.
	Opium.
	Poppy seed.

### DRUGS.

ACETANILID has been advanced during the week, the result it is said of a combination among the manufacturers. Barrels are held at 35c., 100 lb. cases 35 $\frac{1}{2}$ c., and 50 lb. cases 36c.

ALCOHOL, WOOD, continues weak and unsettled with the range quoted 70c. for 95 per cent. and 75c. for 97 per cent.

ARNICA FLOWERS continue in demand, numerous jobbing sales coming to light on the basis of 9 $\frac{1}{2}$  @ 11c. as to quality.

BALSAM COPAIBA is meeting with about the usual amount of jobbing inquiry, but important demand is yet wanting and there is no special variation in price, the quotation standing at 34 @ 35c. for Central American.

BALSAM PERU is developing a firmer tendency and is quoted higher from some holders, but guaranteed pure goods are yet offered upon the market at \$1.50.

BALSAM TOLU is without special variation. We hear of numerous small sales at the current range of 24 @ 27c.

BARKS.—Cascara Sagrada is meeting with freer inquiry, but buyers and sellers are not agreed upon values; the former are prepared to negotiate for quantities at 4 $\frac{1}{4}$ c., though 4 $\frac{1}{2}$ c. is asked in most instances. Chirreta is reported sold to the extent of 500 lbs. at 19c. Soap is a little unsettled, buyers and sellers being apart in their views; crushed is held at 4 $\frac{1}{2}$  @ 4 $\frac{3}{4}$ c., and whole root 3 $\frac{3}{4}$  @ 4c.

CACAO BUTTER, foreign, is meeting with active inquiry, but the absence of any important quantity of stock contributes to a quiet market; the price to arrive is quoted 32 $\frac{1}{2}$ c.

CANTHARIDES continue dull with quotations nominally unchanged.

CIVET is very scarce, and the tendency of the market favors the higher value; the general asking price for quantities is \$4.50 @ \$5.

COCAINE MURIATE has been further advanced 25c. per ounce, the quotations now standing \$5.95 in ounce vials, \$6 in half ounce, \$6.05 in quarter ounce, and \$6.15 in eighths; contracts for 100 ounces can be placed at 20c. per ounce less.

COD-LIVER OIL is advancing into firmer position due to strong cable advices from primary sources, the lay down cost is

equivalent according to quotations received to \$21 for old and \$23 for new crop. Prices here have advanced in sympathy, and \$25 is generally quoted for ordinary quality with indications of a further appreciation.

COCA LEAVES have been in active inquiry during the week, and we are reported numerous large sales of Truxillo at 15 @ 18c. and some hundred bales of Huanaco on private terms. The bulk of these sales were made for consumption to local manufacturers.

CUBEB BERRIES are steadier, the Amsterdam market of late developing increased strength. Fine goods are held at 16 @ 18c. and common and ordinary at 14 @ 15c.

DRAGON'S BLOOD in needs is very scarce and held at full 40c. Mass in stock offers at 30c., though little interest is extended.

ERGOT continues dull, but there is no present urgency to realize, and prices are fairly well sustained at the previous range.

LYCOPodium is meeting with a moderate jobbing distribution at the range of 52 @ 56c., the latter for Politz.

MENTHOL is offered at \$5 for ordinary Japanese, though no sales of any consequence are reported.

OPIUM has weakened slightly since our last report and is now offering with greater freedom. Speculation in the drug having ceased to some extent, and the large consumers having covered their requirements, operations in the drug are confined almost wholly to the jobbing trade. The inquiry, as a consequence, is of a very limited character, and we hear of few full package sales. Single cases are now offered at \$3, without, however, stimulating any important demand. For jobbing parcels there is a steady moderate inquiry with the sales at \$3.10 @ \$3.25 as to test, and powdered is maintained firmly at \$3.70 @ \$3.75.

QUININE continues to reflect a rising market, and the demand is reported good. Outside holders of foreign makes are asking 24c. regular terms, but this figure, it is thought, may be shaded half a cent on a firm cash bid. Considerable business is reported in a jobbing way at 24c. @ 24 $\frac{1}{2}$ c. as to brand, and manufacturers also report the receipt of numerous orders for forward delivery at 25c. The London market is cabled firm at 11 $\frac{1}{4}$  @ 12d., the advices to hand indicating a probable early advance in the quotation from makers' hands.

SAFFRON, American, is maintained at the full recent advance to 42 @ 44c. with a fair demand reported for the small available supply.

SENNA, Tinnivelly, has advanced considerably of late in the London market and prices here have improved to some extent though the two extremes of values owing to the wide variation in quality are unchanged. We quote 6 @ 18c. as to quality.

VANILLA BEANS are jobbing quite actively and the market appears to be quite firm on the basis of \$6.50 @ \$13 for whole and \$5 @ \$5.50 for cuts.

### DYESTUFFS.

CUTCH continues quiet but firm at 5 $\frac{1}{4}$  @ 6c. for prime grades SM, and 5 $\frac{1}{2}$  @ 5 $\frac{3}{4}$ c. for HT. The statistical position is regarded as very favorable and higher prices are soon considered probable.

DIVI DIVI is unchanged from \$5 @ \$65; the distribution at the moment is limited to small jobbing lots.

GAMBIER continues in steady fair inquiry with the sales at 4 $\frac{1}{4}$  @ 5c. Parcels on the wharf ex-London steamer are held at 4 $\frac{1}{2}$ c. Steamer shipments from Singapore are quoted at 4 $\frac{1}{4}$  @ 4 $\frac{1}{2}$ c., though it is intimated that purchases can be made down to 4c. if firm bids were submitted.



INDIGO is without new or important feature; a moderate demand at quotations is reported.

NUTGALLS, Blue Aleppo, are in moderate jobbing demand and firm at  $13\frac{1}{2}\%$  @  $14\frac{1}{2}\%$ .

SUMAC, Sicily, is reported as in better demand with sales at  $\$72.50$  @  $\$77.50$  as to brand and quantity.

TURMERIC is held at 5c., and a moderate trade is reported at this figure.

#### CHEMICALS.

ACETATE OF LIME continues dull, but the market here is steady at 90 @ 95c. for brown and  $\$1.60$  @  $\$1.75$  for gray.

ARSENIC, white, continues in very small supply and the tone of the market is strong in consequence. For Drayton's  $3\frac{1}{2}\%$  is asked, Garland's offers at  $3\frac{1}{2}\%$ .

BLEACHING POWDER continues inactive. German offers freely at  $2\frac{1}{2}\%$  and English at  $2\frac{1}{2}\%$  @  $2\frac{1}{2}\%$  as to quantity.

BLUE VITRIOL is maintained steadily and sales are making at the range of  $2\frac{1}{2}\%$  @  $2\frac{1}{2}\%$ .

CARBOLIC ACID continues very quiet, but for English make the market is firm in view of the continued strong advices from primary sources, best goods held at 13c. and  $20\frac{1}{2}\%$  for drums and bottles. Purchases of inferior grades can be made down to 11c and 17c, respectively.

CARBONATE AMMONIA, English, is offered upon the market at  $8\frac{1}{2}\%$ , though the present cost to import is said to be fully 9c.

BRIMSTONE, crude seconds, continues extremely dull with  $\$17.50$  @  $\$18$  as the nominal spot price and  $\$17$  for forward shipment.

CHLORATE OF POTASH continues dull; moderate jobbing sales of German reported at  $14\frac{1}{2}\%$  and English at  $14\frac{1}{2}\%$ . Powdered appears to be in light supply and firm at  $14\frac{1}{2}\%$  @  $15\%$ .

CREAM TARTAR is not quotably higher, but the market is decidedly stronger in tone, the principal manufacturers offering their goods with greater reserve upon the basis of present values. Crystals may yet be obtained in moderate quantities at  $17\frac{1}{2}\%$  and powdered at  $17\frac{1}{2}\%$  @  $18\%$ .

NITRATE OF SODA continues very quiet, though prices are fairly well maintained at the previous range, of say  $\$1.90$  @  $\$2$  for spot goods.

OXALIC ACID continues to meet with moderate inquiry and we hear of numerous small sales of German at  $6\frac{1}{2}\%$  @  $6\frac{1}{2}\%$  and English 7 @  $7\frac{1}{2}\%$ .

QUICKSILVER is firmer, though not quotably higher. Jobbing sales are making at 45 @ 46c.

SAL AMMONIAC, English, white grain, is offering sparingly at  $6\frac{1}{2}\%$  @  $6\frac{1}{2}\%$ .

TARTARIC ACID is well sustained at  $21\frac{1}{2}\%$  for crystals.

#### ESSENTIAL OILS.

ANISE is maintained at  $\$1.45$  @  $\$1.50$  with, however a very limited inquiry.

BERGAMOT is steady at  $\$1.75$  @  $\$2.25$ , the latter for best grades. Sanderson's brand having declined in the interval to the outside figure with only a moderate amount of interest extended to the article.

CASSIA is quiet but prices are maintained with a fair show of steadiness, 85 @ 95c. representing the range.

CROTON has been in improved jobbing inquiry with values steady at 90c. @  $\$1$ .

CLOVE is firmer but without quotable change, current sales being at the range of 50 @ 53c.

ORANGE is obtainable down to  $\$1.35$ , though some brands in the trade are held up to  $\$1.60$ . The foreign market is cabled stronger.

PENNYROYAL is without new or interesting feature, the current sales being made at the former range.

PEPPERMINT continues very dull, though no quotable change in price is reported. For HGH there is some inquiry for export, but shippers' limits are about  $\$2.65$  @  $\$2.67\frac{1}{2}$  which range is too low for the consummation of business. The stock is under good control and held at  $\$2.80$  @  $\$2.85$ . Bulk quoted  $\$2.30$  @  $\$2.60$  as to quality.

SPEARMINT offers at  $\$1.50$ , though no special interest is extended to the articles.

TANSY is easy with sellers at  $\$2$ .

#### GUMS.

ARABIC remains quiet but in fair jobbing demand with prices well sustained upon the basis of 10 @ 11c. for sorts.

ASAFETIDA is selling moderately and the market is firm at 15 @ 30c. as to quality.

CHICLE is inquired for but importers decline to meet buyers below the point of 27c. We quote the range at 27 @ 28c.

KINO, powdered, in a jobbing way yet offers at 90c.; for whole  $\$1$  is asked.

SENEGAL continues in moderate jobbing inquiry and the market is steady; sorts quoted 9 @  $9\frac{1}{2}\%$  with numerous small sales at this range.

SHELLAC continues in good jobbing request and firm. The position of values being sustained by the encouragement received from foreign sources.

TRAGACANTH, Aleppo, is selling quite freely in jobbing parcels and at firm prices. We quote the range at 32 @ 56c. as to quality.

#### ROOTS.

There is little of interest to note in this department.

GINSENG is reported in steady position with sales aggregating 2,000 lbs. at the quoted range.

GINGER, Jamaica, is maintained at steady prices with a fair jobbing inquiry. We are reported a sale of 13 barrels of prime old unbleached at  $13\frac{1}{2}\%$ ; new crop offered at 11 @ 12c.

GOLDEN SEAL continues held at  $22\frac{1}{2}\%$  @ 23c., though no sales of any consequence are reported.

SARSAPARILLA, Mexican, in first hands is held at 9c., but this value is above the limit of buyers; the jobbing price is  $9\frac{1}{2}\%$ .

SENEGA has been in demand during the week for consumptive purposes and we are reported numerous small sales; also 1,000 lbs. Manitoba for export at 39c.

SNAKE, Texas, is quiet but firm at 30c.; the quantity available is small.

IPECAC continues to offer at  $\$1.30$  @  $\$1.40$ , though the demand is only for jobbing quantities.

#### SEEDS.

ANISE is held at full previous prices though only small sales are noted.

CANARY, Smyrna, continues in fair consumptive inquiry with the current sales at  $2\frac{1}{2}\%$  for good quality.

CARAWAY, Dutch, offers more freely and at a shade lower price, say  $6\frac{1}{2}\%$ .

CORIANDER is in better request and the market is firmer. Unbleached is now held at  $5\frac{1}{2}\%$  @ 6c. and bleached at 6 @  $6\frac{1}{2}\%$ .

HEMP, Russian, upon spot may be obtained in a quantity way at 25c., while for small lots up to  $2\frac{1}{2}\%$  is asked. The import cost is reported as equivalent to the latter figures.

MUSTARD, yellow California, is reported sold export to the extent of several hundred bags at  $3\frac{1}{2}\%$ .

POPPY, German, offers down to  $5\frac{1}{2}\%$ , though trade is not stimulated by the concession.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED first-class salesmen to sell side line on commission; only those selling to first class trade need apply; state the line of goods now carried; samples small. Address H. T. C., care this office.

A POSITION will be open in about two weeks for a drug clerk who has 8 or 10 years' experience, and is registered in New York State; preference will be given to a married man about 30 years old. Apply by letter to W. A. Demarest, 115 Fulton street, New York.

#### POSITIONS WANTED.

POSITION WANTED by druggist of seven years' practical experience, wholesale and retail, as traveling salesman, or clerk; have been for two years and am at present managing a retail business; best of references. Address Box 37, Slatersville, R. I.

YOUNG MAN desires permanent or temporary position; graduate and licentiate of New York State; good habits; genial; has eight years' experience and best references; city or country. Address "Calamus," in care of this office.

SITUATION WANTED as drug clerk by a young man 26 years old, with no experience; no bad habits; good reference and a good commercial education. Box 71, Coldwater, Ohio.

JUNIOR DRUG CLERK, four (4) years' experience, wishes position; country preferred; can furnish references. Address "Sodine," Box 178, Bay Shore, Long Island.

POSITION WANTED in some town in Ohio by a young man aged 25 years; 8 years' practical experience in retail drug store; can furnish good references. Address "Cortex," this office.—10.

#### BUSINESS OPPORTUNITIES.

RARE BARGAIN in a drug business; present proprietor has other business and must close out by April 1 or May 1; first class chance. Address Ferguson's Pharmacy, Cooperstown, N. Y.

FOR SALE.—Drug store doing a large prescription business on the principal business street of the most enterprising city on the Hudson River; invoice about  $\$3,300$ ; rent  $\$25$  per month; good reason for selling. Address "A. B. C.," care this office.—9.

TO DISSOLVE PARTNERSHIP.—The old established Buffalo Homoeopathic Pharmacy is offered for sale; store is centrally located on Main street; object for selling, proprietors desire to devote their time to practice of medicine. Address Drs. McCrea & Buck, 362 Main street, Buffalo, N. Y.—11.

I have 166 numbers of THE PHARMACEUTICAL RECORD which I wish to sell or exchange. Address H. Barker, druggist, Plainfield, N. J.

FOR SALE.—In one of the largest manufacturing cities of Connecticut, a small well paying drug business; complete stock; light expenses; situated in best manufacturing neighborhood; nearest drug store half mile away; first class chance. "Pinus," in care of this journal.

BACK NUMBERS wanted of AMERICAN DRUGGIST, Vol. 18, No. 9, and PHARMACEUTICAL RECORD, Vol. 10, No. 7. Address, stating price, "Record," 37 College place, New York.

FOR SALE.—A fine drug store, in the best town in Eastern Penn.; population about 10,000; rich country all around; no cutting; store elegantly stocked and equipped; owner leaving the State; unless you mean business do not answer. Address "Chemist," care this office.—12.

FOR SALE.—The drug stock of W. D. Balliett at Middleport, N. Y.; stock and fixtures involved at a low figure, about  $\$1,800$ ; cash buyer can secure at much less; a nearly new Tufts' Gaelic fountain included in above costing four years ago with founts, etc.,  $\$450$ ; can buy without fountain if desired. W. H. Garland, Middleport, N. Y.

EXCLUSIVE TERRITORY for a quick selling business specialty; really a commercial necessity, the constant supplies for which will yield highly remunerative returns; men of ability with small capital will be given exceptional opportunities if their references are satisfactory. "Scotch," care this office.

# American Druggist and Pharmaceutical Record.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

### Circulates Everywhere.

Does THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD strike foreign trade?

We recently received an order from J. G. White & Co., Prince Albert, Sask., N. W. T., for a "Boston" Petty Ledger ordered through our advertisement in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. We did not expect to reach the foreign trade in your paper.

Yours truly,

A. G. MOORE & Co.,

47 COURT STREET, BOSTON.

### LEGISLATION IN OHIO.

THE pharmacists of Ohio are in an angry mood over the attempts now being made by interested parties in that State to secure the passage of a bill in the State Legislature to repeal the pharmacy act of Ohio. While not a repeal bill in the exact sense of the term, the measure, if it becomes law, will permit any one who can claim five years' experience in a drugstore to register as a pharmacist or as an assistant pharmacist, as the case may be, without any examination whatsoever. That the bill is a political "strike" of some kind is of course readily apparent, as no one who had the interests of the public at heart would think of fathering a measure of its kind. Its passage would pave the way for the registration of all sorts of incompetents who have heretofore failed to pass the examination of the State Board of Pharmacy and would certainly work detriment to conscientious and hard working pharmacists everywhere.

The Ohio State Pharmaceutical Association is working vigorously in the matter and has sent out a circular to all of its members, requesting them to write personal letters to their Senators and use every influence possible to oppose the bill. In the circular referred to, it is urged among other things that, "The passage of the proposed bill would be a great injustice to all who have made pharmacy a study and have qualified themselves and passed a successful examination before the State Board of Pharmacy."

The circular is signed by JOHN BRYNE, Columbus, O.; W. H. SYFERT, Columbus, O.; T. L. A. GREVE, Cincinnati, O.; C. N. NYE, Canton, O.; and J. A. MAYER, Dayton, O.; who constitute the committee on pharmacy law.

As the pharmacists of Ohio are quite satisfied with the law as it stands and as we have heard no complaint from other parties, who might claim to have a stronger interest in pharmaceutical affairs, we are but strengthened in the conviction expressed in our opening paragraph. It would be difficult to think of a more wholly inexcusable bill or one which would be likely to cause a greater waste of time or money among pharmacists all over the State than the one under consideration. It should be opposed at every step in its passage.

THE proceedings of the twelfth annual meeting of the Massachusetts State Pharmaceutical Association have been published in book form, after the custom of the Association. In addition to the full report of the minutes of the meeting, which was held at the Atlantic House, Nantasket Beach, on June 20, 21 and 22, 1893, it contains transcripts of the laws pertaining to pharmacy in the State of Massachusetts, and reprints of the papers on pharmaceutical subjects read before the members. The report of the Committee of Local Organization is a particularly interesting one, giving, as it does, in a charmingly discursive form, the experiences of the president, HENRY CANNING, in his early attempts to form local organizations in several of the larger cities of the East. Most of the papers on pharmacy which appear in the bound volume of the proceedings were printed in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD shortly after the meeting adjourned last year. The papers read before the Association are remarkable for their practical value, and the bound volume of the annual proceedings is, on account of this feature alone, well worth the annual membership fee. The book is neatly printed, the cover page being worthy of special mention.

THE calendar of the Pharmaceutical Society of Great Britain has just been issued. The calendar contains among other things an account of the founding of the society, a copy of the Royal charter of incorporation, copies of the acts affecting pharmacy in the United Kingdom of Great Britain and Ireland, by-laws of the society, and a full list of members and associate members of the society. Every country almost with the exception of the United States is represented on the list of corresponding members. EDWARD R. SQUIBB, who was selected in 1878, is the only American whose name appears on the list of honorary members.

THE new Norwegian Pharmacopoeia will probably make its appearance during the first half of the current year. The official titles of the articles will, it is said, be in Latin, though it is likely that the text will be in Norwegian. A commission composed of two medical councillors,

three professors and two apothecaries (Court Apothecary Schardt and Mr. Errall), has also been appointed to revise the Swedish Pharmacopoeia. This commission held its first sitting on January 20.

### Preservation of Infusions by the Addition of Antiseptics.

The addition of antiseptics to ordinary infusions is, of course, inadmissible, but these so-called concentrated infusions usually contain 15 or 20 per cent. of strong alcohol. The two chief objections to this addition are (1) the cost of the alcohol, and (2) the alteration in physical character which is produced by its addition. In several discussions on the preservation of infusions and fluid extracts, chloroform has been mentioned, but generally dismissed as altogether without the pale of discussion. This, I venture to think, is a great mistake. For instance, I produce a concentrated infusion of senega, preserved by the addition of 1 in 400 by volume of chloroform. Fluid extracts may be preserved equally well without the use of alcohol. One fluid drachm contains, therefore, one-seventh of a minim of chloroform, a quantity surely too small for any objection to be raised to its presence. If the infusion contained alcohol as a preservative the same dose would probably be equal to fifteen minims of rectified spirit. The diluted chloroformed infusion would contain 1 in 3,200 of chloroform, equal to half drachm of chloroform water in one ounce. This amount of chloroform has a very slight taste even in plain water, and in presence of other flavors becomes practically indistinguishable. Moreover the addition of 1 in 400 of chloroform produces no precipitate and no change in the physical appearance of the fluid, such as follows the addition of 15 or 20 per cent. of rectified spirit. The relative cost of chloroform and rectified spirit when used in the proportions I have mentioned is about 1 to 80, if 20 per cent. of rectified spirit be used. In using chloroform the greatest care must be taken to prevent any contamination or incipient decomposition before the addition of the preservative to the finished product. Where admissible, it is a good plan to raise the finished fluid to the boiling point in order to sterilize it, and then add the chloroform as soon as it is cold.

My own experience has proved that chloroform might advantageously replace alcohol as a preservative in many pharmaceutical preparations.—EDMUND WHITE in a paper read before the London Chemists' Assistants' Association.

### Two New Boron Compounds.

Two new boron compounds, diphenylboric acid and the corresponding chloride, have been obtained in the Rostock Laboratory by Prof. Michaelis, and an account of them, together with several other more complex aromatic derivatives of boron, is contributed to the latest issue of the *Berichte*. In the year 1879 Prof. Michaelis, in conjunction with Dr. Becker, succeeded in preparing phenyl boron chloride  $C_6H_5BCl_2$ , the first boron compound containing a benzene radicle. This interesting substance, a liquid which boils at  $175^\circ$  was obtained by heating together to about  $200^\circ$  in a sealed tube the corresponding quantities of boron chloride,  $BCl_3$ , and mercury diphenyl,  $Hg(C_6H_5)_2$ . Upon bringing it in contact with water a beauti-

fully crystalline and powerfully antiseptic substance, phenyl boric acid,  $C_6H_5B(OH)_2$ , was produced, which upon heating evolved water vapor, and yielded the anhydride  $C_6H_5BO$ . It is now shown that diphenyl boron chloride,  $(C_6H_5)_2BCl$ , is formed when the monophenyl compound is heated along with a further quantity of mercury diphenyl to  $800$ – $820^\circ$  in a sealed tube. The product is a mixture of diphenyl boron chloride with mercury chloro-phenyl  $Hg(C_6H_5)Cl$ , from which latter compound the former may be separated by extraction with an organic solvent. Upon distillation of the extract a liquid is eventually isolated which boils at  $270^\circ$ , and which proves to be pure diphenyl boron chloride. It is a thick, colorless liquid which fumes slightly in moist air. Upon heating with water it is decomposed with formation of a substance endowed with an exceedingly powerful and penetrating odor. This substance rapidly collects as an oil upon the surface of the water.

The Active Principles of Iris Florentina.—MM. F. Tiemann and G. De Laire have examined the root of this plant and have reported their results to the Academy of Sciences (Paris). From it they have obtained a glucoside, iridin, by treating the alcoholic extract with a mixture of acetone and chloroform of density 0.95. The iridin crystallizes in small white needles, fusing at  $208^\circ$ , and corresponding to the empirical formula  $C_{21}H_{31}O_{11}$ . Heated under pressure with sulphuric acid diluted with weak alcohol, it decomposed into glucose and a crystalline body *irigenine*. This forms alcoholic ethers, and also gives rise to two series of acid ethers. Through the action of alkaline hydrates it absorbs three molecules of water, and then splits into three bodies—viz., formic acid, an acid phenol termed *iridic acid*,  $C_{10}H_7O_6$ , and a phenol termed *iretol*,  $C_7H_5O_4$ . The latter body is rapidly decomposed by the oxygen of the air when in an alkaline solution. When iridic acid is heated above its point of fusion it splits into molecule of carbolic acid and a colorless oil distilling at  $239^\circ$  by cooling. It solidifies in large crystals fusing at  $57^\circ$ , constituting a well-defined new phenol now termed *iridol*.

Detection of Cottonseed Oil.—Although silver nitrate affords a very satisfactory means of detecting admixture with cottonseed oil, if a chloroform solution of it be heated with the silver nitrate over a water bath, when the cottonseed oil has been previously boiled, the test fails. Crook has brought forward a test for the boiled oil. About ten grains is placed in a half ounce porcelain crucible. A white disk of filter paper first moistened with hydrochloric acid and dried, and then again just moistened with a 12 per cent. solution of silver nitrate, is placed in the concave side of a watch glass and inverted over the capsule, which is heated to  $240^\circ$  F., and the heat immediately withdrawn. A light brown to black coloration indicates cottonseed oil. Even less than 1 per cent. can be detected with certainty.

Calomel soap is recommended by Watzewski as possessing many advantages over mercurial ointments. It is prepared by blending the fumes of calomel with potash soap in the proportion of one to two or one to three. Two to three grammes should be used daily (*Rev. des sciences med.*, and *Journ. de pharm.* [5], xxix., 77).

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

Harness Oil.—F. H. asks for a recipe for harness oil.

Here is one which is recommended as being free from surplus grease and tendency to smear:

Oil of turpentine.....	8 fl. ounces
Beeswax .....	3 ounces
Prussian blue.....	$\frac{1}{2}$ ounce
Lampblack.....	$\frac{1}{4}$ ounce

Melt the wax in an iron ladle, add the turpentine, a portion first to the finely powdered Prussian blue and lampblack, and thin with neatfoot oil.

Perfect Keeping Paste. A. A. H.—The *Scientific American* prints the recipe given below as one which affords a paste that will not sour on keeping. It will be noted that salicylic acid is advised as a preservative. The use of this substance is objectionable on account of its tendency to turn black on exposure to air or on coming in contact with iron implements or utensils, and corrosive sublimate is said to be a more satisfactory preservative, though objectionable from a sanitary standpoint. The latter may be used in the proportion of five grains to every pound of paste.

Wheaten flour.....	1 oz.
Powdered tragacanth.....	$\frac{1}{4}$ "
Powdered gum arabic.....	$\frac{1}{4}$ "
Salicylic acid.....	30 grs.
Oil of wintergreen.....	3 drops.
Water.....	12 oz.

Mix the powders and gradually add the water, then bring to a boil, allow to simmer for twenty minutes, stirring constantly. When cold add the oil.

To Remove Rust Spots from Marble. F. & Co.—A paste made by incorporating soda lye, ox-gall and turpentine with pipe clay in proportions approximating: turpentine, 1 ounce; lye, 6 ounces; ox-gall,  $\frac{1}{2}$  ounce; pipe clay sufficient to make a paste, is accounted excellent for the purpose indicated. The paste is applied to the stain in a fairly thick layer and allowed to remain for several days. Iron mold or ink spots may be taken out by dissolving in  $1\frac{1}{2}$  pint rain water,  $\frac{1}{4}$  ounce oxalic acid,  $\frac{1}{4}$  ounce butter antimony, flour sufficient to make the mixture of a proper consistency. Put on with a brush, let it remain a few days, wash off. Grease spots may be removed by applying common clay saturated with benzine.

Sterilized Tablets for Physiological Salt Solution.—B. J. Schwalm prepares tablets weighing 8 grammes each, composed of pure sodium chloride, with a little added dextrin, which are furnished in a sterilized condition for use in making physiological salt solutions for intravenous injection in chlorosis or in cases of great loss of blood. Two of the tablets will make one liter of 0.6 per cent. solution. It was found the compressed tablets would not do, as they dissolved too slowly. The tablets are, before packing, sterilized by exposure to a dry heat of  $130^\circ$  C. for half an hour. In using them care should be taken to have the water and all the instruments used in a sterile condition.

## News and Notes.

### Liquor Legislation.

Wm. W. Bartlet, Ph.G., president of the Massachusetts Druggists' Alliance, was the first speaker at a recent hearing before the liquor law committee in favor of a bill to limit and regulate the sale of intoxicating liquor by druggists for medicinal, chemical and mechanical purposes. The great object to be attained, in his opinion, was the taking of the power of granting licenses from boards of aldermen and selectmen and placing it in the hands of a commission, composed of five members of the board of pharmacy.

In answer to a question by ex-Representative Rockwell, he said that perhaps in a place like Fitchburg, where there were 16 druggists, the board of aldermen would be more competent to pass upon the fitness of those receiving licenses than would be members of the board of pharmacy, but political influences would prevent them from licensing the best druggists. In answer to Representative Farley of Lowell, he said the bill had a tendency to create a monopoly, and thought that would be a good thing; he also admitted that it would be a great political power to place in the hands of the five men composing the commission.

Geo. W. Cobb appeared as a member of the Mass. S. P. A.; he believed the bill under discussion was a step in the right direction. It was to his mind a complete solution of the druggist license question. Ex-Representative Rockwell of Fitchburg appeared as a remonstrant and sailed for the act in his usual vigorous fashion. The measure, he said, had not the indorsement of the State Pharmaceutical Association, but only of its legislative committee, and it was a mistake to think that body favored the proposed law. It meant, as did House bill 37, the creation of a monopoly. In answer to the claim that boards of aldermen did not use discretion, he named a number of cities and towns in which licenses were not granted; he presumed it was because the druggists there were not deemed fit to hold licenses.

### Manitoba Association.

The annual meeting of the Manitoba Pharmaceutical Association was held in Winnipeg on February 26. Those present were: J. F. Howard, president, in the chair; E. Casselman, Emerson; G. W. McLaren, Morden; B. M. Caniff, Portage; N. H. Jackson, C. Flexon, Dr. Hutton, J. K. Hill, W. Campbell, W. Pulford, E. E. Lightcap; George Sadlier, Duluth; H. H. Casselman, and J. K. Strachan, registrar.

The reports of the council, treasurer, registrar and auditors were read and severally adopted. The treasurer reports a balance of \$1,800 on hand, and the membership is as follows: registered pharmacists 79, apprentices 28, clerks 14. The secretary was empowered to incur any necessary expense to procure evidence to sustain prosecutions against offenders of the association's act.

The following council was elected for the ensuing two years, H. H. Casselman and E. E. Lightcap acting as scrutineers: J. C. Gordon, J. F. Howard, E. D. Martin, C. Flexon, W. R. Bartlett, Brandon; B. M. Caniff, Portage, and G. W. McLaren, Morden.

During the counting of the votes the president addressed the meeting. He reviewed the standing of the association generally, and commented upon its present healthy financial position.

**Angostura Bitters.** D. P., per D.—We published two formulas for this preparation in the March 1 number of THE DRUGGIST AND RECORD and must refer you to that issue, as the formula is not interesting enough to warrant reprinting at this early date.

**Bromide Cardiac Tonic.** P. W.—This is the name of a "house mixture" used in the New York Polyclinic and credited to Professor Heineman. It is composed of:

Tinct. strophanthi.....	fl. 3 iiii
Tinct. digitalis.....	fl. 3 ii
Sodii bromidi.....	3 vi
Aque.....	ad. fl. 3 iiii

Dose.—One teaspoonful.

**Nux Cardiac Tonic.**—This is also a "house mixture" of the New York Polyclinic composed of:

Tinct. nucis vom.....	fl. 3 i
Tinct. strophanthi.....	fl. 3 ii
Ext. convallariae fld.....	fl. 3 iiii
Aque.....	ad. fl. 3 iiii

Dose.—One teaspoonful.

**Muller's Fluid.** T. R.—This fluid, which is perhaps the most commonly employed liquid for hardening pathological specimens, is made by the following formula:

Potassium bichromate.....	8 parts
Potassium sulphate.....	1 part
Water.....	100 parts

**Lang's Solution,** about which you inquire, is used by microscopists for the purpose of fixing delicate tissue elements to show minute structural detail. It is made of:

Mercuric chloride.....	5 Gm.
Sodium chloride.....	6 Gm.
Acetic acid.....	5 Cc.
Water.....	100 Cc.

**Cheap Florida Water.**—J. F. S. & S. ask us to publish a formula for a cheap Florida water that can be sold with profit to barbers. He says that all of the recipes in his possession are too costly.

The formula given below yields a product of excellent flavor and a water which can be retailed at a profit. Take of

Oil of bergamot.....	4 fl. ozs.
Oil of lavender.....	4 fl. ozs.
Oil of neroli.....	5 fl. drs.
Oil of orange.....	4 fl. drs.
Oil of cloves.....	1 fl. dr.
Concentrated essence of musk.....	1/4 fl. dr.
Tincture of tonka.....	1 fl. dr.
Alcohol.....	5 pints
Water.....	3 pints

Mix and set aside for several days before filtering.

**To Harden Glue.**—This can be accomplished by adding bichromate of potassium to the glue in the dark and then exposing to the light. In case of the presence of considerable impurity or too great an excess of water it is possible the bichromate would not act. The best proportion to use would have to be determined by experimenting with the particular glue that it is proposed to make use of.

**Silver Plating of Steel or Iron.** I. H.—The best results are obtained with the method here given: 15 grains nitrate of silver are dissolved in 250 grains water, and 30 grains cyanide of potassium are added; when the solution is complete, the liquid is poured into 700 grains water wherein 15 grains common salt has been previously dissolved. Articles of steel or iron intended to be silvered by this solution should, after having been well cleaned, be placed for a few minutes in a bath of nitric acid of 1.2 sp. gr. just before being placed in the silvering fluid.

Small articles may easily be coated with silver by dipping them first into a solution of common salt, and rubbing with a mixture of one part of precipitated chloride of silver, two parts of potassa alum, eight parts of common salt, and the same quantity of cream of tartar. The article is then washed and dried with a soft rag.

**The Kneipp Water Cure.** Dr. D.—This now famous cure takes its name from its founder and sole propagator, Father Kneipp, a Bavarian monk or preacher. He cured himself of a disease pronounced incurable over forty years ago, and he has been practicing and recommending the treatment ever since. Persons come from all parts of the world to his simple establishment in Wörishofen. His method is to accustom his patients to tramping barefooted in ditches of water, constant dousing and bathing, and the wearing of coarse hairy underwear called the Kneipp shirt which keeps up a constant friction. Some remarkable cures are reported, and he rouses faith in the most skeptical of his patients. Very general attention has been directed to the cure of late on account of its having been taken up by the Pope, who has called Father Kneipp to Rome.

**Lines from "Patience."** M. B.—The verses you are in search of occur in Gilbert and Sullivan's opera of "Patience" where Bunthorne, the "fleshy poet," offers them as "a wild, weird, fleshy thing, yet very tender, very yearning, very precious."

OH, HOLLOW! HOLLOW! HOLLOW!

What time the poet hath hymmed,  
The writhing maid, lithe limbed,  
Quivering on amarantine asphodel.  
How can he paint her woes,  
Knowing, as well he knows,  
That all can be set right with calomel.

When from the poets plinth  
The amorous colocyath  
Years for the aloe faint with rapturous thrills,  
How can he hymn their throes,  
Knowing, as well he knows,  
That they are only uncomounded pills!

Is it, and can it be,  
Nature hath this decree,  
"Nothing poetic in the world shall dwell?"  
Or that in all her works  
Something poetic lurks,  
Even in colocyath and calomel?  
I cannot tell.

This gentle satire on the esthetes was printed in this journal as far back as November, 1881, when the paper was published under the name *New Remedies*.

## Correspondence.

### Galen, Jr.'s Cough Mixture.

**Editor AMERICAN DRUGGIST:**

The controversy regarding the amount of morphine contained in each teaspoonful of Galen, Jr.'s cough mixture, which has been carried on for some weeks in your valuable journal, has attracted my attention and compelled interest.

The gentleman from Blue Wing, N. J., who appeared last in the matter, is evidently a gentleman of positive ideas, for he assumes that all concerned are wrong and he only is right. With every deference to his superior intelligence in the matter under discussion may I be allowed to point out that he is as much out of the way in his calculations as any of the gentlemen whom he has attempted to set right. Not to quibble too much I will assume that Mr. Quencer's letter of inquiry was prompted by a desire to ascertain how much acetate of morphine is contained in each teaspoonful. This query seems simple enough to be answered off-hand. When we consider, however, that no two teaspoons are alike in capacity, the merits of the query are seen in another light. For myself I think you are nearest right in saying that each dose of the mixture will contain a little over 1/4 grain, as the majority of teaspoons hold a little over a fluid drachm of liquid.

ROBERT A. LEE.

NEW YORK POLYCLINIC, March 12, 1894.

### Long Hours in Pittsburgh.

The pharmacists of Pittsburgh are inaugurating an early closing movement and are seeking relief from excessive and continuous work on Sundays. G. B. Dosch has been moving actively in the matter and is the author of the following letter, which was published in the daily newspapers of the town.

The long and arduous service of druggists in the large cities is attracting the notice of many people, and a remedy for their relief is being sought, especially from the excessive and continuous work on Sunday. Long service during the week, averaging from 12 to 16 hours daily, warrants the demand for rest on the Sabbath. The needs of the public could be fully supplied by opening the store at certain intervals during the day, say two hours in the morning, one in the afternoon and two in the evening—the time to be devoted to the filling of prescriptions and furnishing actual necessities. This plan would allow the druggist and his clerks to attend church and enjoy the society of their families and friends, and it would also avoid the necessity of a relief force during meal hours, so that in most stores one hand only would be required the entire day.

At present druggists are deprived of social and religious privileges enjoyed by others. This plan would remove social ostracism and permit them to enjoy the means of grace which are calculated to fit them for better service here and also prepare them for the hereafter.

G. B. Dosch.

### A Compliment to Mr Bodemann.

The *Chicago Illustrated Century* contains a very flattering reference in its issue of February 10 to Wm. Bodemann, the well-known Chicago druggist. It says:

Unquestionably one of the finest drug stores in this section of the city, is that of Mr. W. Bodemann, located at the southwest corner of Forty-third street and Lake avenue. Mr. Bodemann brings all the advantages of the highest education and long practical experience to bear in catering to the demands of patrons and strives to serve them with intelligence and in a satisfactory manner.

It is hardly necessary to state that Mr. Bodemann enjoys the full confidence of our leading practitioners and of the community at large, and has built up a business that is deservedly remunerative of the labor and energy bestowed. He is a trustee of the School of Pharmacy, of Northwestern University, and is highly esteemed and respected throughout the drug trade and by the medical fraternity of Illinois.

This is so well deserved a compliment to a respected member of the American Pharmaceutical Association that we are pleased to reprint it in our columns.

### Summer Course in Botany.

The Torrey Botanical Club and the College of Pharmacy of the city of New York will conduct the usual summer course in botany jointly as heretofore.

The course consists of fifteen lectures, given in the lecture room of the College of Pharmacy, 209 and 211 East 23d street, the extensive appliances for instruction possessed by this institution being freely used, and fresh material for illustration being collected weekly. Competent lecturers are provided by the Committee of Instruction of the Torrey Botanical Club. In addition to the lectures, ten excursions are conducted into the woods and fields by the lecturers or other members of the committee. These excursions are in the nature of extended out-of-door lectures.

So soon as the pupils are competent, lessons in analysis are given upon the excursions, and special days are set apart for studying several of the more difficult groups.

The course of 1894 will commence with a lecture at 4 P.M., on Thursday, March 22, and the lectures will be continued weekly at the same hour until June 28. The excursions will be made on Tuesdays and Saturdays, the hour and place being announced at the Thursday lecture, and the members making choice of the Tuesday or Saturday section. The sections are too large to admit members upon both days. The lectures will be given by Mr. T. H. Kearney, Jr.

Although the course has thus been extended from ten to fifteen lectures, the price of tickets remains at \$5 as heretofore.

For those desiring instruction in microscopical botany, the laboratory will be open on Thursday afternoons, from 2 to 4. Mr. Henry Kraemer, Ph.G., will conduct this course, for which the college provides microscopes and all necessary apparatus. The price of tickets for this course, which has also been extended from ten to fifteen lessons, remains at \$15. Tickets may be obtained at the college.

### Gotham Gossip.

Geo. Rau has sold his store at 6th street and 2d avenue to M. and J. Weiss.

Horace T. Klein opened a new store at 56th street and 6th avenue on March 8.

W. Goworowski has succeeded Jacob Weiss in the pharmacy at Willet and Houston streets.

F. G. Geinim is now proprietor of the store owned formerly by Grimm & Weiss at 4th street and Avenue B.

E. Zeigler has left Bongartz's pharmacy, 58th street and 9th avenue, and is now at 88th street and Manhattan avenue.

Mrs. J. Dorn, wife of the West Side druggist, left for Ireland last Saturday on a pleasure trip to see her mother, sister and brothers.

S. Wexler is the proprietor of a well appointed pharmacy at 281 East 5th street, which has been open a little over a fortnight.

Julius Tannenbaum, class of '93, has bought out the drug store at Fifty-fourth street and Lexington avenue, formerly owned by T. E. Fraser.

Our enterprising contemporary, the *New England Druggist*, has opened a New York office at 817 Temple court, which will be in charge of Dr. Ottiwell.

Dan. J. O'Connell, the well-known pharmacist of 82½ Broadway, is to open a pharmacy at 55 Whitehall street, about May 20, which, rumor hath it, will be palatial in its fittings.

John Kramer and Herman Schmidt have purchased the pharmacy of Samuel Troughton at 923 Third avenue, and will conduct it henceforth under the firm name of Herman, Schmidt & Co.

C. Graham Bacon, Jr., of C. G. Bacon & Co. and G. A. Fuller have engaged passage for Europe on the steamer New York to sail for Europe on June 6. The tour as planned will include nearly all of the European capitals and will be one of pleasure.

Professors Rusby's lecture at the College of Pharmacy last night was one of the most interesting and instructive yet given in the series delivered under the auspices of the New York Alumni Association. While in England Prof. Rusby had unusually valuable opportunities for examining the large quantities of crude drugs stored in the London warehouses in original packages. He procured a vast quantity of matter of the most interesting character, both commercially and botanically, on the subject of crude drugs, and the choicest portions of this matter served as a basis for the lecture.

### New York State.

Frank Woods, formerly a popular salesman with the Trommer Malt Extract Co., of Fremont, O., is now located with Fred N. Mason, a prominent pharmacist of Port Jervis, N. Y.

Jno. J. Chambers, the popular druggist of Middletown, N. Y., on account of increasing business will move about the 1st to larger quarters, two doors from his present location.

A new firm has been incorporated at Albany, under the name "Wonderine Manufacturing Company," to manufacture toilet articles and engage in a general drug business; capital, \$5,000. Directors: John A. Yaltes, Franklin Everhart and Edward G. Arthur of New York city.

Mrs. Mary, the wife of Doctor Robert G. Eccles, was a party to an interesting contest before the Brooklyn Board of Excise on March 7 to determine whether or not a saloon should be allowed on the corner opposite to where her drug store is located on Atlantic avenue and Smith street. Dr. Eccles himself went before the commissioners and protested against the proposed saloon because, as he stated, it was intended to drive his wife out of business. We hope the commissioners will forget for once the claims of "the party" and refuse to grant the license.

### New Jersey.

Louis J. Meurer is about to open a new drug store in Bloomfield.

A. Geist is now in charge of C. W. Knapes' pharmacy at Carlstadt.

Z. Taylor Clark, who has been very successful in Bayonne, N. J., has invested in a new store.

F. A. Lowe, class of '92 N. Y. C. P., and Frank E. Brownell, '90, have opened a pharmacy in Orange.

Herman Weller, class of '87 N. Y. C. P., has left the employ of Scherrf in Bloomfield, N. J., and expects to soon go into business on his own account.

Sumter Beegle, who has been employed by S. Orn for the past year, is about to go into business for himself, having purchased a one-half interest in the Asbury Park Pharmacy of G. E. Williams.

Henry Hoagland, a son of the late Peter W. Hoagland, who was an old time wholesale druggist in New York City, is now located with McNair & Hoagland, of Hazleton, Pa. Harry Hoagland learned the drug business with Benham & Wilson, of Montclair.

Frederick Uhlman, a druggist, of Passaic, N. J., had a miraculous escape from death at the Erie station on the 8th inst. An express train, running at the rate of about thirty-five miles an hour, struck him and turned him over and over several times. He was not injured. One of his shoes was torn from his foot by the pilot of the engine, but his spectacles, which rested on his nose, were not disturbed during his somersaults.

### Boston Notes.

George F. Dow of 2524 Washington street was arrested recently for an alleged illegal sale of intoxicating liquor at the time of arrest. Before making the arrest, the officer, who was in civilian dress, purchased a half pint of whisky.

Geo. C. Goodwin's store 36 Hanover street, was robbed of \$8 worth of articles a short time ago; the thief was subsequently arrested, and it is said that he was out on probation for a previous larceny from a druggists' sundries store on Devonshire street.

Registered pharmacists who are making illegal use of their certificates must have a care and conform to the laws, for the board of registration in pharmacy is after them closely, and several certificates have been suspended and others revoked be-



cause of illegal usage. The appropriation made by the legislature of 1898 is bearing fruit. Several raids have been made, and a number of drug stores have been closed. When possible to accomplish the desired result without appeal to the courts, and when in the opinion of the board the public good does not demand an exposure, the board withholds the facts from the press.

The evening of February 27 Young's Hotel witnessed the monthly meeting of the Boston Druggists' Association. After attending to the wants of the inner man President Babcock read an original skit entitled "The Druggist's Calendar," which was well received. Then followed an interesting symposium of reminiscences upon "My First Year in the Drug Business." Messrs. Metcalf, Joel S. Orne, Thomas Doliber, Prof. G. F. H. Markoe, Henry Canning, Amos K. Tilden, William W. Bartlett, Henry M. Whitney, Freeman H. Butler, and William A. Chapin were the subjects selected for this most pleasant oratorical contest. "Preston of New Hampshire" became a member and Prof. Markoe was delegated to represent the Association upon the Massachusetts State Board of Trade.

Conspirators Eugene Levitan and Leonard J. Pastor, who secured a certificate from the Massachusetts Board of Pharmacy, by fraud, have at last met their fate. This was only after a fruitless attempt had been made to have the government agree to a money fine, however. The men finally pleaded guilty and were each sentenced to six months at hard labor in the house of correction; this was after eleven weeks sojourn in Charles street jail. Pastor's cunning did not desert him in this trying or (or sentencing) period and when called before the court for the final disposition of his case, he made an appeal for leniency. He informed the court of his great love for pharmacy, that he came to this city a stranger, and was driven to the act by starvation. He believed Levitan to be qualified to act as a pharmacist, and had he known him to be incapable, he would have allowed starvation to run its course rather than be a participant in the deed. It can be safely assumed from the sentence, however, that the judge was not moved by this argument. After the final disposition of the case President Whitney, in commenting upon Pastor's qualifications, stated that he considered him competent to pass the examination of any board of pharmacy in the country. As a memento of this case the board has the certificate of Levitan, the securing of which has resulted so disastrously to him and his companion in crime.

Last week the board had a peculiar case to decide. It was that of Michael H. Wallace of Chelsea, who was charged with making improper use of the certificate granted to him. Wallace was formerly an assistant surgeon in the United States navy, and has had two duplicate certificates issued to him to replace those which he claimed to have lost. Prior to the hearing he was a man of leisure, and it is supposed that his certificate income allowed him to be such. President Whitney occupied the chair at the two hearings, and the members of the board are loud in their praises at the admirable manner in which he conducted the proceedings, the outcome of the affair being largely due to his tact. After a full consideration of the facts in this case the board issued the following bulletin:

That after every opportunity given Michael H. Wallace, with permission to bring any witnesses to the adjourned hearing to testify in his behalf, he has completely failed to controvert the testimony that his certificate has been unlawfully used, and that his previous usage of certificate (of which he had three granted him), one original and two duplicates—one of which was unlawfully used in Lowell in 1891—shows that he is not a proper person to be entrusted with the rights conveyed by a certificate of registration in pharmacy.

It is, therefore, the unanimous opinion of the members of the board present that, the case being a most flagrant one, the three certificates which have been granted him are hereby revoked altogether."

### Maine.

Bath is to have a new store. Mitchell & Leonard are the proprietors.

F. E. Fickett & Co., of Portland, have improved the equipment of their store by the addition of a new Low Art Tile fountain.

This State is ripe for local organization upon the lines adopted by the Interstate League. An energetic worker pursuing the methods adopted by Irving W. Smith, of Providence, R. I., in forming the Mortar and Pestle Club of that State, would find his efforts meeting with prompt and substantial results.

During the big fire in Bath, Hallet's drug store was wholly destroyed. It was valued at \$15,000 and insured for \$6,500. This same fire seriously interfered with the business of W. G. Webster, as it was not checked until after the entire top of the building which he occupies had burned away. Mr. Webster's loss was mostly from water and is estimated at \$800; he carried a small insurance.

### New Hampshire.

I. N. Perley's store, Lebanon, was badly scorched by a recent fire; loss, \$4,000; insured for \$2,800.

The business of E. H. Webster, Milford, who failed a short time ago, is now being carried on by the assignees.

David Kimball & Co., of Portsmouth, have been making improvements in their store and have added a new Low Art Tile fountain.

W. R. Jones, Francetown, is regaling his customers with soda drawn from a new fountain just purchased from the Low Art Tile Co., Boston.

### Richmond Notes.

James Blain, of the Blain pharmacy on East Broad street, was married recently.

The Polk Miller Combination gave a very enjoyable entertainment at Corcoran Hall on the 6th inst.

The bill amending the existing pharmacy law has passed both houses of the legislature by a large vote.

Druggists as well as physicians are complaining very much about the stagnant state of collections and trade.

The Medical College of Virginia had an appropriation of \$5,000 made it by this State during the session of legislature.

There has been exhibited a real live 'possum in the window of T. A. Miller that seems to attract very much attention.

The pharmacy owned by Paythness & Warren, formerly at 117 E. Main, has been moved to the corner of Second and Main streets.

J. A. V. Golden has ventured into business again on North 2d street, in the stand recently occupied by T. C. Pace, deceased.

The First Street Pharmacy has been moved from First and Leigh streets to Rocketts, where it is owned by Messrs. Owens & Minor, and is known as the People's Drug Store.

Several druggists went to the Henrico County Jail to see the alleged murderess, Lizzie Walters, who is in for poisoning a man named Jenkins who died very suspiciously. Some of the druggists recognized the murderess but could not remember selling her poison.

A bill has been presented in the legislature now in session by several prominent druggists, providing for an amendment to the existing law, which is, in substance, "that candidates for examination by the board for assistants' certificates shall have had two years' experience and to become a registered pharmacist the applicant shall have had four years' experience, though it is provided that a registered pharmacist can temporarily leave in charge (for not exceeding six days) the assistant, nor more than thirty days within a current year."

### Michigan Mention.

Otto Kurz has started a new drug business at 752 Michigan avenue, Detroit.

Dr. Charles A. Baker, proprietor of the Crystal Pharmacy, Crystal, will shortly take in a partner.

Fire last week gutted the business section of Reed City. W. A. Strong & Sons lost \$1,000 on their drug stock. Partly insured. Most of the goods were moved in time.

J. C. Moeller has opened a new drug store in the old stand of C. K. Trombley, 644 Gratiot avenue, Detroit, who recently removed his drug business to 671 Gratiot avenue.

The Southern Chemical Co., Detroit, filed their annual report last week as follows: Capital stock, fully paid in, \$150,000; amount invested in patent, \$55,000; personal estate, \$14,359.69; debts, \$7,407.13; credits, \$4,085.20.

The Burrell Chemical Co., Detroit, also filed their report. Capital stock fully paid in, \$100,000; real estate \$38,906.30; personal estate, \$62,371.72; debts, \$1,961.52; credits, \$12,461.57.

The report of the Antrim Chemical Co. Detroit, is: Capital stock authorized, \$100,000; paid in, \$75,000; amount invested in franchise, \$25,000; personal estate, \$51,577.08; debts, \$4,238.87; credits, \$2,934.42.

As related in a recent issue of THE AMERICAN DRUGGIST, the entire body of retail dealers here have decided to cut rates, or meet the competition of the slashers. The sign painters have been busy ever since, and now every retail druggist in the city, with few exceptions, announces in flaming letters that all reductions will be met. To some this means ruin, but others say it is what they have been wanting for some time.

Our representative dropped in at the Cadillac Hotel, Detroit, the other day, and while there met over twenty different traveling salesmen representing various drug concerns. There is no question but what the kindly treatment extended by the proprietor, Mr. Graves, to the members in attendance at the last National Wholesale Druggists' Convention has resulted in this increased number of drug guests. Mr. Graves enjoys a well deserved popularity among drug salesmen.

George D. Luna, Edmore, has sold his stock of drugs to H. E. Heath, who will continue the business.

C. E. Hollister, Detroit, sprained his ankle last week from a header off his bicycle.

Mr. Leighton, Kalamazoo, has sold his drug business to Nelson Abbot, a physician of Lima, Ohio.

The druggists of Manistee have all signed an agreement not to cut rates. Each offender will forfeit \$25, which will go to some charitable institution.

Chickanoire Tomohira, a young Japanese chemist, died at Detroit last week from poison believed to have been self-administered. He was well educated and of a highly connected family in Japan. He was employed in the laboratory of Frederick Stearns, who became acquainted with him four years ago while traveling in Japan. Tomohira was a graduate of the College of Pharmacy at the University of Michigan. An inquest will be held after the stomach has been analyzed.

### Random Notes.

A lady has received the appointment of apothecary to the Norristown Hospital for the insane. She is Miss Mary Reynolds of Philadelphia, a graduate of the College of Pharmacy of that city. Miss Reynolds will be remembered as the lady who had charge of the dispensary and drug store at the World's Fair.

H. Fisher & Sons, the well-known druggists of Bridgeport, Conn., have just placed in their store a soda fountain of more than ordinary beauty of design. The base of the apparatus is made of Paderonyx cut in small squares, each being of different color and veining. About the center of the base is also a frieze of the same onyx cut in squares, with rosettes of the same. The ends and trimmings of the fountain are of Rouge Jasper marble. The top of the apparatus is finished in white and gold. It combines in it a large round beveled-edge plate-glass mirror in the center, before which hangs an elaborate chandelier. At each side of the central mirror are four smaller ones, and at the side of these are long narrow mirrors. The apparatus was made especially for H. Fisher & Son, by J. W. Tufts of Boston, Mass., from designs furnished by their agent, J. O. Wild, and is said to combine in its interior arrangements many improvements never put into a soda apparatus before.

### Pharmacy Boards.

GEORGIA STATE BOARD OF PHARMACY. —The Georgia Board of Pharmacy met in the Senate chamber of the capitol, Atlanta, February 26. Messrs. Goodwyn, Sharp, Payne and Slack were present and conducted the examination of ten applicants, six of whom passed and four failed. The successful candidates were, Messrs. W. M. Caldwell, Chipley; O. B. Hartzog, Atlanta; R. C. Hood, Harmony Grove; H. T. Mash, Savannah; R. K. Nipper, Bainbridge, and L. C. Newman, of Alabama; O. B. Hartzog made the highest mark and was awarded the complimentary interstate certificate. The board also took action on the adulteration law and hope soon to enforce the same throughout the State. Complaints should be made to Dr. George F. Payne, State Chemist, Atlanta, or Dr. H. R. Slack, secretary, Lagrange. The Sprague medal and the prize membership in the A. P. A. will be awarded when the board meets with the Georgia Pharmaceutical Association in Americus, May 7.

THE MASSACHUSETTS BOARD OF PHARMACY held another examination last week. Of the 46 candidates examined, the following were successful and were granted certificates: C. E. Alonzo Cameron, Springfield; Albert W. Thomas, Boston; Leon C. Ellis, Lynn; Henry E. Bannister, Benjamin F. Wyr, James A. Beane, Boston; Fred. E. Jones, Lowell; Benjamin R. Day, Boston; Thomas F. Carey, Woburn; Alexander W. Cunningham, Fred. C. Beane, Boston.

### Trade Notes.

Clark's Capillusia for the hair is stated to be a reliable physician's preparation for promoting a luxuriant growth of hair. It is an excellent dressing for the hair at all times, as it is free from grease and any objectionable admixture. It is advertised almost exclusively to the retail drug trade, and is kept in stock by leading druggists everywhere. Orders may be sent to any wholesale druggist or direct to the maker, A. M. Clark, 186 Liberty street, New York. Write for plan of introduction, and circulars.

Williams, Davis, Brooks & Co. have an interesting announcement in this issue with respect to Dabrooks' perfumes. If you are interested in the latest perfumes you will be sure to read this announcement, as the list is in many respects unique. It contains the names of a number of new odors whose clever titles will appeal with especial directness to the feminine mind. The pleasing style of package adopted for the goods is also a point in their favor and should contribute to a wide popularity among all who possess a discriminating taste in perfumery. Write them for descriptive circulars.

Have you investigated the Scates plan? If not you can possibly learn something to your advantage by writing to the Scates Medical Co., Westbrook, Maine, for full information. The plan embraces many features which, if properly supported by the trade, might do much toward eradicating the cutting evil. Every purchaser of the goods of the company becomes a stockholder, one share being issued for every purchase amounting to \$10. The goods include two good sellers, Vitalized Tonic and Laxcive, and a full line of non secrets which are furnished to members of the corporation at a slight advance above cost. With each bottle of Tonic a sight draft for \$1 is inclosed which customers, are dissatisfied with the operation of the medicine can return to the company and have their money refunded. They also furnish free sample of Laxcive and distribute a very complete line of unique advertising material. Write them mentioning this journal.

Those who have not heretofore sold Burnham's Clam Bouillon and other preparations of the E. S. Burnham Company should turn to the half page advertisement of the firm which appears in this issue, and take advantage of the invitation there given, to write for free samples and discounts. The address of the E. S. Burnham Company is 120 Gansevoort street, New York.

The John Matthews Apparatus Co., First avenue, 26th and 27th streets, New York, advise us of the following changes in the price of their celebrated brand of Snow Flake Marble Dust, which is now offered to the trade on the terms quoted:

One to 50 bbls., \$1.20.

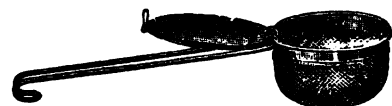
Fifty bbls. and upward, \$1.10.

Free on board in New York; if taken from the factory the price is \$1 per bbl.

"Antisepticon" is the name of a new chewing gum which is expected to become the most popular of all chewing gums as it is being handled largely by the drug trade of the country which is, of course, a kind of a guaranty as to its quality. The style of package is most attractive, while the contents are said to be superior to any of the gums on the market. Druggists who wish to stock this new gum may order supplies through any jobbing druggist or direct from the manufacturers, the Antisepticon Company, 1110 to 1116 Sansom street, Philadelphia, Pa., with branch office at Bridge street, New York, and 306 Central Union Block, Chicago, Ill. Write them for sample mentioning this journal.

### A Nipple Sterilizer.

Walter F. Ware, 70 North Third street, Philadelphia, who is widely known to the trade as the owner of the "Mizpah" line of specialties, is introducing the "Mizpah nipple sterilizer" as illustrated herewith. Many advantages are claimed for the new instrument, chief among these being the one that rubber nipples may be boiled in water without injury, thus insuring a thorough cleansing and making them clean, sweet and healthy. In calling at-



tention to the advantages of the new sterilizer Walter F. Ware mentions incidentally that nipples cannot be safely boiled without the "Mizpah," as where the nipples do not float on the surface of the water, they sink to the bottom of the cup or boiler and are melted. The "Mizpah" nipple sterilizer is sold to the trade at \$1 per dozen, with a discount of 10 per cent. on 6 dozen. The retail price is 15 cents each. A descriptive circular of this and other specialties can be had on application to Walter F. Ware.

### Pharmacy of Cod-Liver Oil.

In the good old days when cod-liver oil was taken without any thought of possible palatability the product generally offered in the market was repulsive stuff, possessing a pronounced odor of sole leather and a rank, fishy taste. To render the oil more palatable and, incidentally, more readily assimilable emulsification was resorted to, and the oil is now almost invariably exhibited in the form of an emulsion, although physicians are aware that the intervening emulsifying agent is a burden to the weakened digestive organs of an invalid.

Now that the novelty has been worn off, we are prepared to question whether or not the subdivision of the oil by emulsification really facilitates absorption, inasmuch as it seems most probable that the sugar and emulsifying medium will be separated in the stomach, and the oil accumulate in large globules before reaching the duodenum, where by aid of the pancreatic ferments it is prepared for absorption.

From this it would appear that palatability is the chief advantage possessed by emulsions, and now that Lofoten cod-liver oil (P. D. & Co.) has been rendered so palatable there seems to be little occasion to administer mixtures containing acacia, which is itself a calcium salt and has no place among foods.

Last, but not least, is the question of permanency. It is a well known fact that cod-liver oil grows rancid more rapidly

in contact with sweetened water, which constitutes the base of nearly all emulsions, than when preserved pure in closed vessels. Lofoten cod-liver oil is prepared with a special view to permanency.—L. C. FINK in *Therapeutic Notes*.

### Reliable and Salable at All Times.

Planten's capsules have been on the market since 1886, and their sales continue steadily to increase as the years pass, fully demonstrating that their thorough reliability has been fully established and well recognized, and, further, that "the best" goods always remain popular with consumers, and are therefore most profitable to stock at all times. The most in demand are Platen's capsules of pure Para copaiba balm, compound copaiba balm and cubebs (also known as Platen's black), and Sandal capsules in the 15, 10 and 5 minim size hard and 10 minim size elastic soft, as well as the perloids 5 minim size, while many of the other varieties manufactured by H. Platen & Son can be stocked to advantage in small lots.

The jobbers all carry Platen's capsules, and should you desire such kinds as they do not have on hand you can obtain them from the manufacturers by remitting the list price. Have you seen Platen's improved empty (Wellcome shape) rectal capsules? If not, send to H. Platen & Son for samples.

If you have any private formulas you wish encapsuled at the most advantageous price to yourself, we suggest that you correspond with Messrs. Panten, mentioning this journal.

### The National Dispensatory.

Upon the first appearance of this work fifteen years ago a very large edition was exhausted in six months. The characteristics which secured this immediate recognition were its authoritative accuracy, its completeness, and the convenience with which desired information could be found owing to the exclusion of obsolete matter. These features have been carefully preserved in the successive editions, of which five have been demanded at brief intervals.

The work contains the latest and ripest knowledge of that pharmaceutical savant, the late John M. Maisch, who had practically completed before his death the sections reserved for himself. He had confided the remainder of the pharmaceutical portion to Professor Charles Caspari, Jr., who occupies the chair of pharmacy at the Maryland College of Pharmacy in Baltimore.

The therapeutical department has been brought thoroughly abreast of the time by Professor Alfred Stillé, M.D., who has included critical statements of the value of even the newest remedial agents. A most suggestive "Therapeutical Index" is provided, giving practical suggestions under the various diseases arranged in alphabetical order. This, together with the general index, contains the vast total of 25,000 references. The National Dispensatory covers by authorization the new U. S. Pharmacopœia.

Though the new edition of the Dispensatory contains at least 100 pages more than its predecessor, it will probably be maintained at the same low price in view of the certainty of a large and growing demand. It contains many new tables, lists, and descriptions of new processes and tests, and will be a work of indispensable value to all who have to do with any of the medical sciences.

## Notes on Prices.

### Package Prices.

The prices current issued under date of March 7 by William H. Raser, 32 Platt street, New York, states that there is very little life in trade at present, business for the most part being confined to current jobbing orders, and not much doing in large lines.

Opium: dull business and lower cables from Smyrna have further weakened this market; although the general quotation for cases is \$3 there is no doubt that with orders in hand to-day, a fraction less might be done, probably \$2.95. For broken parcels some holders continue to ask \$3.10, but \$3.05 and possibly \$3 will now buy. Pure powdered opium unchanged at \$3.70 and \$3.75.

Quinine is steady at previous prices, with a fair jobbing demand; foreign bulk 23½ @ 24¼c. as to brand, quantity, etc., with some round lots available at 23½c. cash. Cinchonidia B & Sm in 100 ounce tins, 1,000 ounce lots or more at 2¼c.; smaller lots at 2½c. Another brand of German, in large cans of 500 ounces each, can be bought in large lots at 2c. (say 10,000 ounce lots.)

Acetanilid advanced to 35c. in bbls. and tending higher. Prime Bermuda arrow root, kegs 100 lbs. at 24c. St. Vincent arrow root in bbls. at 7½c. Balsam fir, Canada: most holders are firm at \$3.75; one party offers a limited quantity only at \$3.60.

Cocaine muriate has again advanced to \$5.60 to \$5.95 as to brand, quantity and form of package. Cream tartar: outside lots are disappearing and the market is growing steadier; it would not be surprising to see an advance before very long in this article and tartaric acid as well. Balsam Peru is advancing; \$1.50 @ \$1.55 and more is now asked. Tolu is unchanged. Cattle bone, Trieste, single straps at 10c.; for 5 or 10 strap lots 9½c. will buy. Ergot has further declined.

Dragon's blood in seeds about out of market. Mannas of all grades are lower. Cod-liver oil, Norwegian: depressing news as to the catch this season is causing an advance. Large lots have been sold here within the past day or two at \$20 @ \$21, and \$21 is now the minimum price, with some asking \$22. Malaga olive oil is also higher.

Acid, carbolic, is higher abroad; this market unchanged, but firm. Camphor, Japan, is lower at 44c. for ounce cakes in 2 pound packages and bulk in 2 pound blocks 43c., and 8 pound blocks 42¼c. American sublimed camphor in barrels is unchanged at 45c. or 44c. net for 10 barrels or more. Dextrine is lower at 4¼c. for prime imported and American 3 @ 3¼c. Coriander seed of good quality is getting scarce and higher. Canary seed is somewhat easier. Russian hemp seed is offering more freely. California white mustard seed is lower. Dutch caraway tending lower. Fenugreek seed further advanced. American saffron again advanced. Ipecac higher. Jalap lower. African and Race gingers have further declined. Other spices without material change. Sugar of milk: a further drop in values.

### Chicago Prices.

Morrison, Plummer & Co., wholesale druggists, Chicago, issue their monthly prices current under date of March 6, 1894. Referring to the condition of trade it is noted that the period under review has not developed much of interest. Values,

as a rule, have been steady, and only the usual number of fluctuations has occurred. The special features of the market are commented upon as follows: Acids: Citric is slightly lower; oxalic firmer and tending upward. Alcohol, wood, 95 per cent., declined 10c. gallon on the 26th ult., and is now quoted at 70c. gallon by the barrel; 80c. in 10 gallon cans including packages. Balm Gilead buds of good quality are not to be had at present; there is some demand for them. Camphor, Japanese refined, and Simes compressed slightly lower. Cinchonidia is higher in sympathy with quinine, and is attracting some attention. Cocaine is higher, owing (it is said) to a scarcity of crude materia abroad. Codeine has been advanced 25c. 1 oz. Glycerin, standard brands, reduced to 13c. pound in 50 pound cans. Gums: Arabic we quote at a reduction on Asafoetida is higher abroad. Kino, owing to reduced supplies, is higher. Production seems to be stopped. Leaves, cocoa, are advancing. Jaborandi easier. Lycopodium slightly lower. Menthol has declined since our last on account of increased stocks and lower prices abroad. Morphine was further advanced 10c. oz. on the 20th ult. Oils: Essential, bergamot, lemon and peppermint (Hotchkiss), are lower. Others without material change. Oils: Heavy, Cod Liver Norwegian: the catch for January and February is reported as 2,000 barrels less than for the corresponding period last year. Stocks carried over are light and holders look for better prices. Lard, extra, lower at 65 @ 67. Linseed, advanced 2c. gal. on the 24th ult. Opium advanced shortly after our last issue. Morphine manufacturers have bought largely and this article is very firm. Piperazin-Bayer reduced to \$4.25 o. z. Piperazin-Schering is now put up in 10 gramme tubes instead of 5 gramme as formerly, the price remaining the same for 10s as previously asked for 5s. Saffron, American, advanced to 50 @ 55. Seeds, canary, reclaimed, easier at 3¾c. pound in sacks. Hemp, 3c. pound in sacks. Sabadilla has continued to decline and is now selling at 60c. lb. for powdered. Silver Nitrate: Manufacturers made two reductions of 1c. oz. each during February. Sugar milk, owing to domestic competition, has declined sharply. Turpentine advanced to 37c. on the 7th, 38c. on the 9th, and declined to 36½c. on the 26th ult. Paris green: The associated manufacturers, which include the best known brands, will sell their product on the contract plan during the coming season. Prices will not be announced until after April 1st proximo.

### Roessler & Hasselacher Chemical Company.

The Roessler & Hasselacher Chemical Company, 78 Pine street, New York, in their March circular say:

Acetanilid, which for some time seemed beyond the pale of improvement; the demand is fair. We recommend our article as corresponding to the rigorous prescriptions of the new U. S. P., and for its nice appearance. Aniline oils and salt: The past month has brought no material changes for the better, but the demand continues to be steady. It is expected that the conclusions of the German-Russian treaty will cause an advance in the German product, which, under conditions now prevailing, is excluded from the Russian market. Bicarbonate of potash: Our quality meets the requirements of the new U. S. P. For round lots we can shade the prices named. Permanganate of potash has advanced in price abroad. The changes we make do not, however, give full consideration to this advance. Quinine: With a good demand the price for all quinine salts is steady and firm. At the late auction at Amsterdam, nearly the whole amount of bark offered was sold at an advance of 1s per cent., and in view of the comparatively small shipments from Java, further advances in the bark are not improbable. Sal ammonia continues to advance in price.

## Review of the Wholesale Market.

NEW YORK, March 14, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is a less active demand noted for the various staples in the department of drugs, dyestuffs and chemicals, the output since the opening of the new month being considerably less than the distribution during the corresponding period of last year. There is, however, in the aggregate a fair trade doing and the belief is entertained that the month will produce good business results. Supplies for all staple goods are known to be light in the interior, and with an increased consumption to stimulate manufacturing the present firmness in prices may fairly be expected to be sustained.

In the face of the limited demand at the moment, buyers may be said to have the advantage when desirous of making stock additions. The more important price revisions are noted below as follows:

### ADVANCED.

Cod-liver oil.  
Shellac.  
Gum arabic.  
Coriander seed.  
Acetic acid.  
Nitrate of soda.  
American saffron.

### DECLINED.

Opium.  
Camphor.  
Nitrate silver.  
Glycerin.

### DRUGS.

**ALCOHOL.**—Prices are still maintained by the Trust at the quoted range of \$2.24 @ \$2.28, less the usual rebate. The independent makers are, however, reported to be pressing the combine closely, with the result that supplies can now be obtained in instances below Trust figures by those who refuse to work on the rebate plan. The independent producers are quoting exceptionally low figures at present, the prices now prevailing among outside competitors being about \$2 @ \$2.02½, and a fair amount of business is reported doing at these figures.

**BALSAM COPAIBA** is in fair jobbing demand, with the current sales at 34 @ 35c. for Central American; Para is firm at 43 @ 45c.

**BALSAM FIR** is quiet, and the demand does not exceed jobbing proportions. We quote Canada at \$3.60 @ \$3.75.

**BALSAM PERU** continues firm at the recent advance; there is a good consumptive demand at the current range of \$1.50 @ \$1.55.

**BALSAM TOLU** continues to meet with a moderate inquiry at the quoted range of 24 @ 27c. as to quality and seller.

**BARKS** of all kinds remain quiet, though without quotable change. Buckthorn in jobbing quantities realizes 6½ @ 8c.; Cascara Sagrada 4¾ @ 5½c.; Elm 10½ @ 12c.; Sassafras 6½ @ 7c., and Soap 3½ @ 3¾c.

**BUCHU LEAVES** are in moderate demand, but supplies here are not large and the tone of the market is firm at 22 @ 25c. for long and 9 @ 11c. for short.

**CACAO BUTTER** in bulk upon spot is held at 32 @ 32½c.; sales to the amount of 6,000 lbs. are reported at the outside figure.

**CANTHARIDES** are in moderate consumptive demand and firm at 25 @ 27c. for whole Chinese and 29 @ 30c. for powdered. Russian are steady at 65 @ 70c.; powdered is jobbing fairly at 75 @ 77½c.

**COCA LEAVES**, Truxillo, are offering to arrive at 18c., this for goods of prime quality.

**COCAINE MURIATE** is maintained firmly by the manufacturers at the recent advance, reports from Europe advising an actual scarcity of the crude. We quote the current range at \$5.95 @ \$6.15 as to quantity.

**COLOYCINTH APPLES** are quiet, but the quotations of the market are nominally unchanged, Spanish offering at 20 @ 24c. and Trieste at 28 @ 33c.

**COD-LIVER OIL**, Norwegian, has developed an exceedingly firm tone, the poor results of the season's fishing having contributed to a scarcity which has marked up prices considerably. Sales are reported of some 300 barrels for which fully \$22.50 was paid. Holders are becoming cautious about offering supplies even at the market range, as higher values are anticipated. The full recent advance to \$23 is now well sustained.

**CUBEB BERRIES** continue in fair jobbing inquiry at unchanged figures; the current sales of ordinary and stemless being made at 14 @ 18c., and powdered 18 @ 20c.

**CUTTLE BONE**, Trieste, continues without new feature; the market is easy with single straps offering at 10c.

**ERGOT** continues extremely dull, with, however, no quotable change in price to report. German held at 25 @ 27½c., and Spanish 28 @ 32c.

**GLYCERIN** is in an unsettled condition owing to sharp competition among manufacturers. The nominal price of drums is 12c. and barrels 12½c., but sales have been made recently at points considerably below and the quotations of the market may be regarded as entirely nominal.

**GUARANA** is slightly easier and is now offering down to 90c.

**JUNIPER BERRIES** are maintained steadily at 2¾ @ 3c. with sales of moderate quantities within the range.

**MENTHOL** continues held at \$5 and we hear of numerous small sales at this figure.

**MORPHINE** does not offer below the quoted range which represents manufacturers' prices.

**OPIUM** has declined a few points since our last report, but has not otherwise developed action of consequence. The continued absence of interest which has characterized the actions of consumers points to a cessation of the speculative movement commenced recently in the Smyrna market, and it is not unlikely that a decline in prices will follow; more especially as the reports of damage to crops in Asia Minor remain without authoritative corroboration. Spot goods do not offer in this market below \$2.90, though late quotations from Constantinople and Smyrna indicate a lay down cost of \$2.60 @ 2.65; parcels in transit are offering in instances at \$2.75. The jobbing price continues about on a par with the case value, sellers being open to bids of \$2.90 @ \$2.95, and we hear of numerous small transactions at these figures. Powdered does not change from \$3.70 @ \$3.75.

**QUININE** offers a good contrast to opium, being in firm position and in good consumptive and jobbing demand. Upon regular terms foreign brands from second hands are held at 23¾ @ 24c., though possibly 23½c. would be entertained upon a cash basis. Foreign in large bulk from manufacturers is held at 25c. and domestic 27½c.

**SAFFRON**, American, is sustained at the recent advance to 42 @ 44c. and a fair demand is the rule.

**SENNA**, Tinnivelly, has been meeting with a fair moderate inquiry at the quoted range of 6 @ 12c. as to quality; fine hold green goods command as high as 18c.

**SOAP**, white Castile, of the better imported grades, continues to command 9½c.;

imitations of Conti's well known brand are said to be offering at 9½c. and several lots are reported having been taken at this figure by unsuspecting customers.

**ST. IGNATIUS BEANS** are reported very scarce, and held at 60 @ 75c.

**SUGAR OF MILK**, domestic, powdered, continues to offer at 8 @ 10c. per lb. The Wilson bill now in the Senate reduces the tariff to 2c. per lb., which is a cut of 6c.; but it is not thought likely that the reduction will bring about serious competition from the other side, as quotations here are now below the prices ruling in Switzerland.

### DYESTUFFS.

**CUTCH** is maintained in firm position, with 5¾ @ 6c. asked for SM, and 5½ @ 5¾c. for HT. The stock is small and pretty closely concentrated.

**GAMBIER** appears to offer with increased freedom, while the demand is at present of rather a limited character. Store goods are offered at 4¾c. for steamer and 4½ @ 4¾c. for sail, though in a jobbing way a slight advance upon above figures is exacted.

**NUTGALLS**, blue Aleppo, continue in fair, moderate demand, with the price stationary at 13¾ @ 14½c. for Aleppo.

**SUMAC**, Sicily, is maintained at \$72.50 @ \$77.50, within which range a fair jobbing trade is reported.

### CHEMICALS.

**ACETIC ACID** continues to meet with about the usual amount of inquiry; prices are firm upon the basis of 1¾ @ 2c.

**ALUM** is held at \$1.70 @ \$1.75 for lump and \$1.75 @ \$1.80 for ground.

**ARSENIC**, white, is yet obtainable at 3¾ @ 3½c. but the stock available is limited and the tendency of the market toward a higher range.

**BLEACHING POWDER** continues dull but steady at 2½ @ 2¾c. for German, and 2½ @ 2¾c. for English.

**BORAX** continues very quiet, with, however, no quotable change in price. Refined held at 8¾ @ 8½c., and concentrated 7½ @ 7¾c.

**CHLORATE OF POTASH** is in better demand with jobbing sales making upon the basis of 16½c. for German and 14½c. for English.

**CARBOLIC ACID** is dull; English is held at 13c. and 20½c. for drums and bottles, but German is obtainable at 11c. and 17c. respectively.

**CREAM TARTAR** is maintained with some degree of steadiness upon the basis of 17½ @ 18c. for crystal and powdered, and a moderate distribution is going on at these figures.

**CAUSTIC SODA** remains quiet at about previous values. For 70 and 74 per cent. \$2.50 @ \$2.65 is generally required.

**CITRIC ACID** continues dull and the market is a shade weak with barrels quoted 42½c. and cases 43c.; these are manufacturers' prices; from outside hands we hear of cases offering at 42¾c.

**NITRATE OF SILVER** has again been reduced by the manufacturers, the decline being a natural consequence of the depreciation in value of the parent metal. We quote the revised range at 42 @ 43½c. as to quantity, the inside for lots of 1,000 ounces.

**NITRATE OF SODA** continues held in strong position at the range of \$2.10 @ \$2.12½, with the stock under good control.

**OXALIC ACID** may yet be had at 6½c. for German and 6¾c. for English; but the ordinary jobbing range is slightly higher, and an advance on the figures given is in some instances demanded.

**QUICKSILVER** is in steady moderate request and firm at 45 @ 46c.

SAL SODA is selling in a moderate way at 75 @ 80c. for domestic less the usual discount, and 80 @ 85c. for English.

#### ESSENTIAL OILS.

ANISE is without improvement. Importers are free to offer at \$1.42½ @ \$1.45, but consumers' wants are small and only a limited business is doing.

BAY is in moderate demand at the previous range of \$3.50 @ \$4.

CASSIA is unchanged from 80 @ 85c.; jobbing sales only are reported.

CITRONELLA meets with about the usual trade, with the sales at 24 @ 28c.

CLOVE continues to offer at 50 @ 52½c., without however any appreciable increase in the demand.

LEMON is attracting a little more attention in consequence of the low prevailing values. We are reported numerous sales within the range of \$1.30 @ \$1.50.

ORANGE shares the attention bestowed on lemon, and several parcels have changed hands lately upon the basis of \$1.50 @ \$1.60.

PEPPERMINT is somewhat neglected at the moment and free offerings on the part of holders do not seem to improve the distribution. Western goods are being offered to the trade at the lay down cost of about \$2.25 @ \$2.30, and from Wayne Co. supplies can be obtained at \$2.40 here. From store the range of the market is \$2.30 @ \$2.50 as to quality. HGH offers at \$2.77½ @ \$2.80.

SASSAFRAS is given very little consideration at the moment. Artificial is held at 28 @ 30c., and true at 38 @ 41c.

WINTERGREEN remains quiet; small sales at quotations.

#### GUMS.

ALOES continue inactive, although the quotations of the market show no variation.

ARABIC is in better demand, with sales reported of 60 bales sorts to arrive at 10c., and 10 cases picked on p. t.

CAMPOR remains quiet but steady at 42c. for domestic in barrels, and 43c. for cases.

CHICLE can be obtained at 26 @ 27c., though the ideas of most buyers do not exceed 25c.

GAMBOGE is steadily held, and sales are making at 47½ @ 55c. as to quality and quantity.

MYRRH is in moderate request and firm. Sorts are quoted 16c.; firsts, 22c., and selected 30c.

SENEGAL continues in steady moderate request with 9 @ 9½c. representing the range.

SHELLAC continues in active jobbing request and the market is firm, without, however, quotable change in price.

#### ROOTS.

ACONITE is maintained steadily at the range of 11½ @ 12c.

CALAMUS is meeting with moderate inquiry at the quoted range.

DANDELION, German, is bringing 8 @ 9c. with a moderate jobbing business reported within the range.

GINSENG is arriving slowly and is taken promptly by exporters at the range of \$2.50 @ \$3.50 as to quality.

IPPECAC remains quiet but firm at \$1.27½ @ \$1.40.

JALAP of the new crop is arriving and offers to sell at 23 @ 26c.

SARSAPARILLA, Mexican, continues in good jobbing demand and firm at 9 @ 9½c. as to quantity.

SENEGA does not change from 39 @ 40c. Small sales the rule.

SNAKE is inquired for, but the available stock in market is very small. The nominal quotation is 30c.

#### SEEDS.

ANISE continues held at 7½ @ 9c. for Italian sifted, the outside figure being for best grades. A moderate trade is reported at this range.

CANARY, Smyrna, is steady; spot goods are held at 2½ @ 2¾c., but to arrive 2½c. can be done.

CARAWAY, Dutch, is dull, but supplies do not offer openly below 6½c.

CELERY is reported sold to the extent of 27 bags @ 14½c. The general asking price is 15 @ 16c.

CORIANDER is scarce and firm at 6½c. for both bleached and unbleached.

MUSTARD, California, is quiet but firm upon the basis of 3½ @ 4c. for yellow.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED SITUATION in a drug store by a young man of good address, 26 years of age, no experience, no bad habits, good education, good reference, to learn pharmacy. Box 71, Coldwater, Ohio.—12.

WANTED.—A thoroughly competent druggist seeks a position as clerk or manager of a pharmacy; 13 years' experience; speak, read and write German as well as English; A No. 1 reference, and plenty of it; Ohio preferred. Address E. W. SPANNAGEL, 495 S. Washington avenue, Columbus, Ohio.—11.

WANTED first-class salesmen to sell side line on commission; only those selling to first class trade need apply; state the line of goods now carried; samples small. Address H. T. C., care this office.

A POSITION will be open in about two weeks for a drug clerk who has 8 or 10 years' experience, and is registered in New York State; preference will be given to a married man about 30 years old. Apply by letter to W. A. Demarest, 115 Fulton street, New York.

#### POSITIONS WANTED.

POSITION WANTED by druggist of seven years' practical experience, wholesale and retail, as traveling salesman, or clerk; have been for two years and am at present managing a retail business; best of references. Address Box 37, Slatersville, R. I.

YOUNG MAN desires permanent or temporary position; graduate and licentiate of New York State; good habits; genial; has eight years' experience and best references; city or country. Address "Calamus," in care of this office.

SITUATION WANTED as drug clerk by a young man 26 years old, with no experience; no bad habits; good reference and a good commercial education. Box 71, Coldwater, Ohio.

JUNIOR DRUG CLERK, four (4) years' experience, wishes position; country preferred; can furnish A1 references. Address "Sodine," Box 178, Bay Shore, Long Island.

POSITION WANTED in some town in Ohio by a young man aged 25 years; 8 years' practical experience in retail drug store; can furnish good references. Address "Cortex," this office.—12.

#### BUSINESS OPPORTUNITIES.

AN EXCEPTIONAL OPPORTUNITY.—Prominent corner store on Fulton street, Brooklyn, occupied as a drug store for about fifteen years, will be vacated on May 1. Reasonable rent and lease. For further particulars address "Landlord," care this office.—13.

FOR SALE.—Drug business in Albany, N. Y., on the finest street in the city; store modern; extra profits; low expenses; fine soda trade; big bargain if sold at once; best reasons for selling. Address "Surgeon," 88 Grand street, Albany, N. Y.—11.

TO DISSOLVE PARTNERSHIP.—The old established Buffalo Homeopathic Pharmacy is offered for sale; store is centrally located on Main street; object for selling, proprietors desire to devote their time to practice of medicine. Address Drs. McCrea & Buck, 362 Main street, Buffalo, N. Y.—11.

I have 166 numbers of THE PHARMACEUTICAL RECORD which I wish to sell or exchange. Address H. Barker, druggist, Plainfield, N. J.

RARE BARGAIN in a drug business; present proprietor has other business and must close out by April 1 or May 1; first class chance. Address Ferguson's Pharmacy, Cooperstown, N. Y.

FOR SALE.—Drug store doing a large prescription business on the principal business street of the most enterprising city on the Hudson River; invoice about \$2,300; rent \$75 per month; good reason for selling. Address "A. B. C.," care this office.—9.

FOR SALE.—In one of the largest manufacturing cities of Connecticut, a small well paying drug business; complete stock; light expenses; situated in best manufacturing neighborhood; nearest drug store half mile away; first class chance. "Pinus," in care of this journal.

BACK NUMBERS wanted of AMERICAN DRUGGIST, Vol. 18, No. 9, and PHARMACEUTICAL RECORD, Vol. 10, No. 7. Address, stating price, "Record," 37 College place, New York.

FOR SALE.—A fine drug store, in the best town in Eastern Penn.; population about 10,000; rich country all around; no cutting; store elegantly stocked and equipped; owner leaving the State; unless you mean business do not answer. Address "Chemist," care this office.—12.

FOR SALE.—The drug stock of W. D. Balliett at Middleport, N. Y.; stock and fixtures invoiced at a low figure, about \$1,800; cash buyer can secure at much less; a nearly new Tufts' Gaelic fountain included in above costing four years ago with founts, etc., \$350; can buy without fountain if desired. W. H. Garland, Middleport, N. Y.

EXCLUSIVE TERRITORY for a quick selling business specialty; really a commercial necessity, the constant supplies for which will yield highly remunerative returns; men of ability with small capital will be given exceptional opportunities if their references are satisfactory. "Scotch," care this office.

**MAJOR'S CEMENT**  
IS THE STRONGEST.

**MAJOR'S RUBBER CEMENT.**  
**MAJOR'S LEATHER CEMENT.**  
**MAJOR'S BEST LIQUID GLUE.**

**A. MAJOR CEMENT COMPANY,**

Major's Cement is put up in 1 and 2 dozen boxes. Finest package in the market for display on counter or show case.



**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

Acetanilid, bulk, per lb.	.35	①	.36%
" lbs... per lb.	...	②	.58
" ozs... per oz.	...	③	.55%
Acetate of lime:			
Brown, per 100 lb....	.90	④	.95
Gray, per lb.....	.01%	⑤	.01%
Acids:			
Acetic Com'l, pr lb..	.01%	⑥	.008
Aquafortis, 36 deg... 40 .....	.03% .07%	⑦	.03% .04%
Benzoic, German....	.50	⑧	.55
English.....	.00	⑨	.00%
Boracic, Whole.....	.18%	⑩	.18%
Powdered.....	.13	⑪	.13%
Citric, American....	.45%	⑫	.43
English.....	.43	⑬	...
Carbolic Crystals,...			
bulk.....	.13%	⑭	.16
lb. bottle.....	.19	⑮	.21
Muriatic, 16 deg... Nitric, 38 degrees... 40 .....	.90 .03% .04	⑯	.137% .04% .04%
Oxalic, English.....	.07%	⑰	.07%
German.....	.07	⑱	.07%
Pteric.....	.23	⑲	.30
Salicylic.....	1.12	⑳	1.22
Sulphuric.....	...	\textcircled{20}	.25
Tartaric, Crystals..	.85%	\textcircled{21}	...
Powdered.....	...	\textcircled{22}	...
Tannic.....	1.05	\textcircled{23}	1.20
Alcohol, German, per gal. (Leubegate.).....	2.24	\textcircled{24}	2.28
Wood, 95%.....	.70	\textcircled{25}	.75
Alcohols.....	...	\textcircled{26}	1.35
Aloin, pr lb.....	1.00	\textcircled{27}	1.10
Alum, Lump, per 100 lb.. Ground, per 100 lb....	... ...	\textcircled{28}	.75 .80
Antifebrine, per oz....	.19	\textcircled{29}	.20
Antipyrine, per oz....	1.20	\textcircled{30}	1.40
Arrow-root, Berm., lb.. St. Vincent, in bbl., lb.	.24 .11	\textcircled{31}	.25 ...
Arsenic:			
Red Saxon, lb.....	.06	\textcircled{32}	.06%
White.....	.03%	\textcircled{33}	.03%
Balsam, Copaiba, lb..	.31	\textcircled{34}	.35
Fir, Canada, gal....	3.63	\textcircled{35}	3.75
Fir, Oregon, gal....	.80	\textcircled{36}	.85
Peru, lb.....	1.50	\textcircled{37}	1.55
Tolu, lb.....	.24	\textcircled{38}	.25
Bark, Buckthorn, per lb. Cascara Sagrada, lb.. Elm, lb.....	.06% .04% .10%	\textcircled{39}	.08 .05% .12
Orange peel.....	.06	\textcircled{40}	.07
Sassafras, per lb....	.06%	\textcircled{41}	.07
Soap, lb.....	.03%	\textcircled{42}	.03%
Bicarb. Soda, Engl., lb. domestic, lb.....	.03% 3.00	\textcircled{43}	.03% 3.15
Bichromate, Pot'h, lb.. Bismuth, Sub. Nit., per lb., bulk.....	.10% 1.95	\textcircled{44}	.11 2.00
Bismuth, Sub. Carb., per lb., bulk.....	2.85	\textcircled{45}	2.90
Black'g Powd., per lb.. Blue Vitriol, lb.....	.08 .03%	\textcircled{46}	.08% ...
Borax, refined, lb.....	.07%	\textcircled{47}	.08%
Concentrated, lb....	.07%	\textcircled{48}	.08
Brimstone, beat ad, ton	19.50	\textcircled{49}	20.00
Bromide Potash, Dom- estic, b'k, lb.....	.37	\textcircled{50}	.38
bottles, lb.....	.45	\textcircled{51}	.46
Bromide Ammonium, bulk.....	.45	\textcircled{52}	.46
Bromide Sodium, b'k.. Bromine, bulk.....	.42 .43	\textcircled{53}	.43 .45
Burgundy pitch, per lb.. Cacao Butter: 1-lb. boxes, lb..... Dutch A., per lb.....	.08% .33 33%	\textcircled{54}	.08% .34 .34%
Caffeine.....	2.40	\textcircled{55}	2.50
Camphor, red'd., bbls, lb cases, lb.....	.42 .43	\textcircled{56}	.43 .44
Cantharides, Chinese, lb. Russian, lb.....	.95 .65	\textcircled{57}	.27 .77%
Carb. Ammonia.....			
cacika, lb.....	.08	\textcircled{58}	.08%
Cassia Buds, lb.....	.18%	\textcircled{59}	.19
Castor Oil, cases, lb.. Barrels, lb.....	.15 .14%	\textcircled{60}	.15% .15
Castic Soda, as to test Calc. Engl. Precip., alk, lb.....	2.85 .04	\textcircled{61}	3.25 .06
Chloral Hydrate Cry- stals, bulk, per lb.. Hydrate crusts, bulk, per lb.....	1.10 1.05	\textcircled{62}	1.25 1.20
Chlorate Pot. Cry., lb. Pow'd, lb.....	.14% .15	\textcircled{63}	.14% .15%
Chloroform, Bulk, lb.. Chinaidindine, Sulphate of, German, oz.....	.50 .08	\textcircled{64}	.55 .09%
Citrates, U.S.P. Iron, lb. Soluble.....	... ...	\textcircled{65}	.50 .55
Iron and Ammonia, lb. Iron and quinine.....	... 1.50	\textcircled{66}	.50 1.55
Iron and strychnine. Phosphate, U. S. P., lb. Pyrophos., U. S. P., lb.	2.00 ... ...	\textcircled{67}	2.05 ... .57
Pyrophos., Soluble, lb.	...	\textcircled{68}	.85

Citrates, Potash, per lb.	...	0	.49
Soda, per lb.	...	0	.40
Cobalt, powd, lb.	...	.10	.18
Cocaine Murate, per oz.	5	.95	6.15
Codaine, bulk, oz.	4.25	...	4.05
Codine, eight.	4.65	...	...
Cod Liver Oil, Nor-	...	...	...
wegian, bbls.	23.00	...	84.00
Newfoundland	.65	...	.70
Colocynth:	...	...	...
Trieste, lb.	.28	0	.33
Spanish, lb.	.20	0	.24
Copperas, per 100 lb.	.50	0	.80
Cr. Tartar, Crystals, lb	.17	...	...
Powdered, lb.	.17	...	.18
Cubeb Berries XX, lb.	.16	0	.18
Ordinary, lb.	.14	0	.15
Cutch, baies, SM, lb.	.05	...	.06
Cutch, boxes lb.	.08	...	.09
Cuttle bone, Trieste, lb	.09	...	.10
Jewellers' lb.	.35	0	...
Dextrine, lb.	.04	...	.05
Divi Divi, per ton.	55.00	...	65.00
Dragon's B'd, lump, lb	...	0	...
In reeds, lb.	.45	0	.50
Epsom Salts, per 100 lb.	1.00	0	1.10
Ergot:	...	...	...
G'm'n and Russ'n, lb	.24	0	.28
Spanish, lb.	.28	0	.32
Ergotine, Domestic.	...	0	4.00
German	4.00	0	...
Flowers:	...	...	...
Arnica Flowers, per lb	.10	0	.11
Chamomile.	...	...	...
German, New, lb.	.17	0	.24
Roman, New.	.10	0	.18
Lavender, Ordinary,	...	...	...
per lb.	.04	0	.08
Select, per lb.	.15	0	.05
Gambier, lb.	.04	...	.05
Glycerin, bbls, lb	.11	0	.12
cases, lb.	.13	0	.14
Guana, Paradise, lb.	.06	...	...
Guarana, lb.	.90	0	1.00
Gums:	...	...	...
Aloes, Cape, lb.	.05	0	.05
Curacao, lb.	.03	0	.04
Socotrine, lb.	.12	0	.30
Arabic, 1st picked.	.38	0	.43
sd	.25	0	.28
Arabic, sorts.	.10	0	.12
Asafetida, lb.	.20	0	.30
Benzoine, lb.	.27	0	.40
Chicle, lb.	.26	0	.27
Gamboge, lb.	.53	0	.54
Guaiac, lb.	.17	0	.22
Kino, lb.	.90	0	1.00
Mastic, lb.	.27	0	.70
Myrrh, lb.	.20	0	.38
Sandrac, lb.	.29	0	.30
Senegal, picked, lb.	.18	0	.45
sorts, lb.	.09	0	.09
Shellac, DC, lb.	...	0	.31
VSO, lb.	.32	0	.33
Diam'd I, lb	.30	...	.31
SS, lb.	.30	...	...
TN, lb.	.25	...	.27
Garnet.	.20	...	.25
Bleached, lb	.30	...	.31
Tragacanth, Aleppo, lb.	.28	0	.56
Turkey.	.48	0	.75
Indigo, lb.	.45	0	1.05
Insect Flowers.	.14	...	.25
Insect Powder, pure, lb.	.16	0	...
Iodide Potash, bulk, lb.	.75	0	2.80
bot'l, lb.	.23	0	2.28
Isinglass, Am'n's, lb.	.47	...	.60
Japan, lb.	.25	0	...
Juniper Berries, lb.	.02	...	.03
Leaves:	...	...	...
Belladonna, per lb.	.09	0	.11
Buchu, short, lb.	.09	0	.11
long, lb.	.22	0	.25
Coca, prime, lb.	.15	0	.30
Damiana, lb.	.10	0	.14
Hocycamus.	.08	0	.10
Jaborandi, lb.	.25	0	.33
Rose, red, lb.	.53	0	.54
Senna Alex natrl, lb.	.18	0	.25
Senna Tinney, lb.	.05	0	.12
Stramonium.	.05	...	.08
Licorice, M. & R., lb.	.17	0	.19
Lupulin, German.	.45	0	1.75
Lycopodium, lb.	.22	0	.56
Manna, large flake, lb.	.22	0	.83
Small flake, lb.	.30	0	.33
Menthol, Japanese.	...	0	6.00
Mercurials:	...	...	...
Blue Pill, lb.	.31	0	.32
Caiomet, lb.	.08	0	...
Cor. Sublimite, lb.	.55	0	.57
Mercury and Chalk.	.20	0	...
Oment, lb.	.26	0	.37
Red Precipitate, lb.	.78	0	...
White lb.	.23	0	...
Morphine, bulk, oz.	.20	0	2.50
Eight, oz.	.25	0	2.50
Moss, Irish, lb.	.06	0	.06
Irish, bleached, lb.	.13	0	.15
Muriate Potash, per 100	...	...	...
lb.	1.76	0	1.82

Naphthaline, flake, per lb.....	.03	●	.03%
Naphthaline, Ball, per lb.....	...	●	.04
Nitrate Silver, oz.....	.42	●	.43%
Nitrate Soda, 100 lb.....	1.95	●	8.00
Nux Vomica, lb.....	.03%	●	.04
Nutgalls, China, per lb.....	.13	●	.13%
Aleppo, per lb.....	.13%	●	.14%
Oils, Essential:			
Anise.....	1.43%	●	1.45
Almonds, Bitter.....	4.50	●	7.50
Sweet.....	.30	●	.40
Bay, per lb.....	3.50	●	4.00
Bergamot.....	1.75	●	2.25
Cajeput, Native.....	.35	●	.45
Camphor.....	.07	●	.08
Cassia.....	.85	●	.90
Citronella, Native.....	.87	●	.05
Clove.....	.50	●	.53
Copaiiba.....	.70	●	.80
Croton.....	.90	●	1.00
Cubeb.....	1.50	●	1.70
Geranium.....	4.50	●	7.50
Lavender.....	.40	●	2.25
Garden.....	.40	●	.90
Lemon, as to brand.....	1.30	●	1.65
Lemongrass.....	.80	●	.85
Musk, per lb.....	7.00	●	8.00
Myrrh.....	.17	●	.19%
Neroli.....	.35.00	●	35.00
Nutmeg.....	1.80	●	2.75
Orange, sweet.....	1.35	●	1.50
Orange, bitter.....	3.25	●	4.00
Origanum.....	.84	●	1.00
Pepperyal.....	.90	●	1.00
Peppermint, bulk.....	2.30	●	2.60
"    HGH.....	2.80	●	2.85
Rose.....	7.50	●	9.00
Sandalwood.....	...	●	2.85
Sassafras.....	.36	●	.40
Sassafras, Artificial.....	...	●	.85
Spearmint.....	1.60	●	1.80
Tansy.....	2.00	●	3.00
Wintergreen.....	1.40	●	1.50
"    Artificial.....	2.80	●	.87%
Wormwood.....	.25	●	2.25
Opium, Natur'l, ca. per lb.....	2.00	●	3.00
Opium, Ordinary, Jobbing, per lb.....	2.00	●	2.25
Opium, Powd., per lb.....	3.70	●	3.75
Phenacetine, per oz.....	.85	●	1.00
Prussiate Potash, Yellow, per lb.....	.24%	●	.25
Red, per lb.....	.42	●	.43
Quicksilver, flasks, per lb.....	.45	●	.46
Quinine:			
Domestic, bulk, oz.....	...	●	.27%
Domestic, oz.....	.30	●	.35
German, bulk.....	.04	●	.84%
German, oz.....	.27%	●	.29
Roots, Aconite, lb.....	.11%	●	.12
Althea, cut, lb.....	.16	●	.18
Arnica, lb.....	.06%	●	.07
Belladonna Ger., lb.....	.09	●	.12
Calamus, lb.....	.07%	●	.06
Calamus, bleed'g lb.....	.22	●	.24
Colchicum per lb.....	.14	●	.15
Colombo, lb.....	.05%	●	.11
Dandelion, Germ. lb.....	.07%	●	.08
Dogwood, lb.....	.08	●	.10
Galangal, lb.....	.03%	●	.04
Gentian, lb.....	.03%	●	.04
Ginseng, lb.....	2.50	●	3.50
Ginger, Jamaica, b'cd., lb.....	.16	●	.18
Ginger, Jamaica, unblech., lb.....	.18	●	.16
Golden Seal, lb.....	.22%	●	.23
Hellebore, powd., lb.....	.07%	●	.08
Ipecac, lb.....	1.25	●	1.40
Jalap, lb.....	.23	●	.27
Kava Kava, lb.....	.30	●	.25
Licorice, select, lb.....	.17	●	.13
"    Pc w'd., lb.....	.17	●	.18
Lovage, lb.....	.30	●	.35
Mandrake, lb.....	.03%	●	.04
Orris, Florentine, lb.....	.30	●	.30
Orris, Verona.....	.10	●	.28
Pink, lb.....	.84	●	.30
Rhubarb, whole, lb.....	.25	●	.26
Sarsaparilla, Hond lb.....	.28	●	.42
Sarsaparilla, Mex., lb.....	.08%	●	.10%
Senega, lb.....	.39	●	.40
Serpentaria, lb.....	.30	●	.35
Valerian, Belgian, lb.....	.07	●	.07%
"    German, lb.....	.12	●	.12
Saffron, Amn., lb.....	.42	●	.44
Spanish, Valencia, lb.....	5.40	●	6.00
Spanish, Alicante, lb.....	...	●	4.50
Sal Ammoniac, lump, lb.....	.06%	●	.07
Do., Granulated, lb.....	.06%	●	.06%
Sal Soda, Eng., 100 lb.....	.90	●	.95
"    American.....	.80	●	.85
Salt peter, crude, per lb.....	.03%	●	.04
Salt peter, Refined, per lb.....	.06	●	.08
Seeds, Anise, Ital., lb.....	.10	●	1.00%

Seeds, Anise, German lb.	..06	2	..06 1/2
Anise, Star, lb.	..19	0	..80
Canary, Smyrna, lb.	..08 1/2	0	..08 1/2
Canary, Sicily, lb.	..01	0	..03
Caraway, lb.	..06 1/2	0	..07
Cardamom, .....			
Aleppy, per lb.	..65	2	..80
Cardamom, Malabar,			
per lb.	..65	5	1 45
Celery, lb.	15	0	16
Colchicum, lb.	..12 1/2	0	..13
Coriander, lb.	..05 1/2	0	..06
Cummin, lb.	..10	0	..11
Fennel, Germ., lb.	..10 1/2	0	..11
Flax Meal, per lb.	..01	0	..08
Foenugreek, lb.	..07 1/2	0	..03
Flour, Russian, lb.	..08 1/2	0	..03 1/2
Mustard, yel. Cal. lb.	..04	0	..04 1/2
Mustard, brown, Cal.			
lb.	..03 1/2	0	..04 1/2
Poppy, per lb.	..05 1/2	0	..07
Quince, German, lb.	..85	0	..35
Rape, German, lb.	..03 1/2	0	..03 1/2
Rape, English, lb.	..08 1/2	0	..08 1/2
Soap, Castile, Mara,			
mottled, pure, lb.	..06	0	..06 1/2
White, Cont'l's, lb.	..09 1/2	0	..10
Soda Ash, lb., 48% per			
roo lb.	1.80	0	1.25
Squilla, white, lb.	..04 1/2	0	..06
Sugar Milk, powd., lb.	..08	0	..10
Sugar Lead, white, lb.	..11	0	..11 1/2
Lead, brown, lb.	..05 1/2	0	..06
Sulphate Ammonia, per			
roo lb.	2.90	0	3.00
Do. Potash, 48% per			
lb.	1.11 1/2	0	1.15
Do., Potash, 90% per			
lb.	2.20	0	2.15
Sulphur, Roll.	..01	0	..01 1/2
Flour.	..01	0	..01 1/2
Spirita Nitre, U. S. P.	..39	0	..40
Spirit Ammonia, Arom.	..44	0	..45
Sulphuric Ether.	..54	0	..61
Sumac, Sicily, ton.	75.00	0	80.00
Virginia.	47.50	0	49.00
Tar Barbadoes, gal.	..01	0	..45
Tin Crystals, bbls., per			
lb.	..13 1/2	0	...
Jar, per lb.	..15 1/2	0	...
Tonka Beans, Para, lb.	..45	0	..60
Agrostura	1.85	0	2.00
Turpentine, Spiritus.	..31 1/2	0	..31 1/2
Vanilla Beans, lb.	6.50	0	13.00
cut, lb.	5.00	0	5.50
Venice Turpentine, bar-			
rels, lb.	..18	0	..19
Cans, lb.	..19	0	..20
Wax, Brazil, Veg., lb.	..17	0	..22
Japan, lb.	..07 1/2	0	..08
Zinc Oxide.	..30	0	..40

Linseed, raw, gal.....	00	0	58
"    boiled, gal.....	00	0	55
Lard, City Prime, present make, gal.....	64	0	65
West, prime, gal.....	65	0	65
Cotton-seed, Prime, Cruce, gal.....	06	0	...
Summer Yellow, prime, gal.....	31	0	...
Summer Yellow, off grades.....	...	0	...
Prime White, gal....	35	0	36
Sperm, Cruce, gal.....	03	0	65
Natural Spring gal..	03	0	65
Bleached Spring gal.	08	0	70
Natural Winter, gal.	08	0	70
Bleached Winter, gal	73	0	75
Whale, Natural Winter, gal.....	44	0	...
Bleached Winter, gal.	47	0	...
Ex. Bl'ch'd, gal.....	49	0	...
Menhaden, Cruce, Sound, gal.....	39	0	33
Dark, pressed, gal... Light, pressed, gal... Bleached, Winter, gal.	34 36 47	0 0 0	32 38 48
Extra Bleached, gal.	44	0	...
Tallow, City, prime gal	...	0	58
Cocoanut, Ceylon, lb..	05	64	05
Cochin, lb.....	00	00	06
Cod, Domestic, gal... Foreign, gal.....	38 48	0 0	40 45
Red Elaine, gal.....	39	0	40
Saponified, lb.....	05	00	05
Bank, gal.....	35	0	...
Straits, gal.....	36	0	...
Olive oil, table, in tins	50	0	1.85
Com'n, bbl., gal.....	48	0	66
Rapeseed.....	60	0	65
Neatsfoot, prime, gal	60	0	63
Palm, prime Lagoon, lb.	05	00	05

# American Druggist and Pharmaceutical Record.

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### A QUIZ BOX.

UNDER this heading we inaugurate this week a department intended especially for students of pharmacy. This department will be devoted to the publication of a series of questions on pharmacy, to be followed later by the correct answers together with the names of those whose answers attain an average rating of 75 per cent.

These questions will appear each week, the replies to each particular set together with the names of the successful student appearing on the third week after the publication of the questions.

We are prompted to inaugurate this department by the frequent requests that are sent in by students for the publication of examination questions and by the belief that such a department will prove of value in encouraging home study among drug clerks whether they be in attendance at college or not. The course will also serve to keep alive the interest of the student in his studies through the summer vacation.

We ask all our readers to aid us in this department by sending in questions accompanied by answers which are suitable for publication.

In order to give added zest to the contest we will award the following prizes at the close of the current volume on July 1, 1894:

First Prize.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

Second Prize.—Copies of Harrop's "Monograph on Flavoring Extracts," will be awarded to the three persons who make the next highest general average for the entire series of questions.

Third Prize.—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions but who does not win either of the other prizes.

Fourth Prize.—A copy of Lloyd's "Elixirs" to every person who sends in an answer to every one of the questions published in the entire series and whose answers average 66 per cent.

### PHARMACEUTICAL FELLOWSHIPS.

CORNELL UNIVERSITY established some years ago a department of pharmacy in which there were a dozen or so professors, including a professor of cryptogamic botany and, we believe, one on geology, but with no professor of pharmacy. This was made the subject of some satirical comment at the time, but after all is it not possible that the university authorities were justified in their action from their own point of view, which we may assume to have been that of earnest advocates of a higher education.

The facts as they would present themselves to the average university authority, drilled as he must have been into a profound respect for systematic study and for "degrees," would seem to justify him

in the conclusion that a class of men content with less than a professional degree could scarcely furnish a professor from its own ranks whose intellectual attainments entitled him to rank with the other professors in the faculty of the university.

It lies within the province of the pharmaceutical schools of this country to refute any such conclusions. Let these schools provide advanced courses of study for such as may choose to follow them, and confer an adequate degree on such as pursue this course. An earnest worker in one of the large eastern colleges has long been an ardent advocate of the establishment of an advanced course for the degree of Doctor in Pharmacy. A western institution has already taken the initiative in this direction, and it is to be hoped that the standard of proficiency there set may be so high as to command for the institution and for its degree the respect of the world.

There was published in the issue of the *Pharmaceutische Rundschau* for March an able and thoughtful article from the pen of Dr. EDWARD KREMERS which is worthy the serious consideration of every earnest student of matters pharmaceutical and which bears directly upon this subject of higher pharmaceutical education.

Among the suggestions offered in this article are that the larger colleges turn over their entire plant to the State on the condition that the State should properly maintain and support the school thereafter, that the colleges substitute post-graduate fellowships for the money or other trivial prizes now bestowed, and that the American Pharmaceutical Association grant a foreign or traveling fellowship instead of bestowing the grants for original essays, as is now done in small or divided proportions.

The proposal to establish pharmaceutical fellowships as a means of encouraging advanced study was made two years since by Dr. FRED. HOFFMAN, and has not, we think, been given the serious consideration which it deserves.

The good effect of the adoption of this plan by the leading colleges and by the American Pharmaceutical Association would by no means be confined to the particular students who won the fellowships but would be exerted among the large

number who would become contestants. Such a move would result in an awakening among the young men of the county of an interest in higher pharmaceutical education that would soon produce profound scholars who would be a source of profit and pride to pharmacy in the United States.

The advocates of higher pharmaceutical education are met with the objection that there are no students who would care to pursue an advanced course. What if this be true under existing conditions, (and we are by no means prepared to admit that it is true) it does not follow, when the student has the opportunity of such a course held up before him during his whole collegiate term, not as a vague and remote possibility, but as an actual and immediate opportunity, that there will be no matriculants. If the suggestion of Dr. HOFFMAN be acted upon and the, say three hundred dollars, presented by the college in various prizes each year, be awarded in one sum as a post-graduate fellowship conditioned on the recipient devoting six months or one term to study with his alma mater for the degree of Doctor of Pharmacy, the college will itself have provided the first matriculant for the advanced course.

Here, then, is an opportunity for some progressive college to do something practical for the cause of higher education and at the same time win for itself an enviable name as an advocate of that cause.

### REGULATING THE USE OF OPIATES AND NARCOTICS.

IT is likely that another change will be made soon in the section of the Criminal Code of the State of New York relating to prescriptions of chloral, cocaine, opium and morphine, Mr. SAXTON having introduced a bill into the State Senate which he desires to have enacted as a substitute for the original section relating to the prescribing and dispensing of these drugs. The chief provisions of the substitute measure are: Any prescription containing any chloral, cocaine, opium and morphine shall state the date when it is issued and the name and place of residence of the person to whom it is issued. The drug is to be furnished only within two days after the date contained in the prescription; and the package containing the medicine must be labeled so as to show the particular form and quantity of the drug contained in each dose, "except where such drugs are contained in proportions which, because of other poisonous drugs in their composition, can only be used externally."

Any person violating the provisions of Mr. SAXTON's bill will be declared guilty of a misdemeanor, a violation of its provisions being declared such.

Physicians will be disposed to object to the paragraph in the proposed measure which provides that:

"Every physician residing in this State who gives a prescription for opium in any form, cocaine or chloral shall keep a record of the same in a book kept for that purpose, giving the name of the patient and the date of each prescription."

The fact that the measure if it becomes law will compel physicians to record any prescriptions containing any of the drugs mentioned, without regard to the amount of schedule poison there may be contained in each, is sure to be felt with particular severity by the members of the medical profession.

The penalty attaching to a misdemeanor in this State is imprisonment for one year or a fine of \$500, or both penalties combined.

### THOUGHTS ON AN ELIXIR.

WE wonder if there is anything which exercises the minds of pharmacists more than the making of elegant elixirs (and of elixir of triple phosphates in particular). There is certainly no other subject upon which so much good pharmaceutical gray matter has been and is wasted. To the truth of which observation evidence is not wanting as instance the following:

"Kindly inform me in an early number as to why the National Formulary elixir of three phosphates is such an unstable preparation. I know this question has often been brought forward, but I have yet to see it satisfactorily settled. By replying you will confer a great favor."

This is a sample letter taken from among a number of similar communications bearing upon the production of an unchangeable elixir of phosphate of iron, quinine and strychnine. We have also been asked the question by one or two pharmacists, Can the elixir of the three phosphates be prepared to react acid, alkaline or neutral to litmus paper? Others would like to know if it is possible to produce a liquid ferrous phosphate in a neutral solution, etc., etc.

Many have attempted to solve the problem of how best to obtain a clear water-miscible elixir by sacrificing alkaloidal strength to water solubility and appearance of the finished product. But preparations of this kind should not be labeled elixir of three phosphates, much less dispensed as such, since they bear no relation whatever to the semi-official compound or to the preparation which the physician had in mind when ordering the elixir.

The causes of failure in the preparation of a presentable and permanent elixir as told by different experimenters would form an amusing chapter in the history of elixir making. Some who have convinced themselves of the hopelessness of attempting to produce a satisfactory compound according to the prescription of the National Formulary are disposed to lay the burden of blame on the compilers of that very practical compendium, averring that no pharmacist can look for success in

the manufacture of this particular elixir, if he follows faithfully the directions of the Formulary. Others, however, make less sweeping charges, contenting themselves with mild criticisms directed against the manufacturers of certain salts of iron, the phosphate being the one uppermost in their minds.

In all these different appeals to us only the most superficial points have been touched upon. Experimenters who have once or twice attempted to make the elixir of the National Formulary and have failed to turn out a satisfactory solution have allowed themselves to become discouraged without examining into the causes of their failure. Our own experience would lead us to believe that other things besides the formula are at fault. Some regard should be paid to the selection of chemically pure preparations of the substances which go to make up the elixir—there is the salt of iron for example; the properties of this salt are known to vary with the labels of the containers, its solubility and general behavior being very variable.

Many seem to think that the essential oils which form part of the aromatic elixir are a source of mischief, because, perhaps, the majority of the essential oils of the market are little more than turpentine age and other influences having operated to alter materially their chemical constitution.

We are of opinion, however, that these speculations, for no one will regard them as facts, will receive little consideration from practical workers; though reflection may convince them that they are worthy of some attention, especially when the extent to which the practice of adulteration in essential oils is carried is brought to mind. There is probably no other department of drugs in which adulteration is so widely or successfully practiced, and for this reason pharmacists should exercise extreme care in their choice of oils. But equal care should be exercised with regard to the selection of the other ingredients.

If those who have failed hitherto in their efforts to prepare a stable elixir with the ordinary salts of the market will but try the effect of using ingredients of known purity from first step to last of the process, their efforts, we can promise, will be attended with more favorable results.

The main object of these remarks is, of course, to direct more general attention to a preparation whose manufacture has been heretofore beset with difficulties, and to this end we would invite every pharmacist who has experimented with the elixir to favor us with a general account of the processes employed. In this way we hope to draw out practical suggestions on the subject, and it will afford us much pleasure to publish all communications on the subject which may possess the merits of brevity and practical application.

Written for the  
American Druggist and Pharmaceutical Record.

## PHARMACEUTICAL ASSAY- ING BY ELECTROLYSIS.

By J. H. BEAL,  
Scio College, Scio, O.

Each addition to the list of pharmaceutical substances having limitations as to purity and strength increases the importance of assay methods which are accurate and which involve a minimum expenditure of time and attention. The ordinary process of gravimetric analysis is, in many cases, too cumbersome for the limited amount of time at the disposal of the ever busy pharmacist. Commonly the substance which is sought is required to be precipitated in some insoluble form of known composition, washed free from adhering soluble matters, dried, ignited, and weighed. There may be and generally are losses resulting from the partial solubility of the precipitate in the wash water, and volatilization during the operations of drying and ignition. So, also, the weight of the end product may be increased through the addition of extraneous matter, as of filter ash. It follows, then, that the end product of a gravimetric analysis is, to a certain extent, the resultant of opposing tendencies, part of which increase and others of which diminish the final weight. Even the much simpler volumetric processes involve the preparation and keeping of a number of solutions of constantly changing concentration necessitating frequent redeterminations of their values. In addition to the time required both classes of operations generally require the unremitting attention of the operator from the beginning of the process to its close.

Up to the present time electrolytic methods have not received the attention which their applicability to pharmaceutical requirements deserves, probably from the opinion that they involve unusual difficulties of manipulation. That this opinion is a mistaken one, and that they may be frequently applied to the analysis of pharmaceutical substances with an ease and accuracy not obtainable by the ordinary methods, is the object of the present paper.

The ordinary course of an analysis by electrolysis is exceedingly simple. An electric current, generally of very low tension, is caused to pass through a solution of the salt which is to be estimated, causing its decomposition and the deposition of the metal upon a weighed platinum electrode. When the decomposition of the electrolyte is ended the platinum plate and its film of metal are weighed and the known weight of the platinum subtracted. From the remainder, which is the weight of the metal deposited, the quantity of pure salt contained in the electrolyte may be obtained by the usual calculations. In the case of substances which cannot be caused to deposit upon the platinum electrode, it is sought to combine them with metals in the form of salts which may be electrolyzed, and the amount of the electro-negative constituent obtained by calculation from the weight of metal deposited. It is thus seen that, while the methods of electrolysis may have a somewhat limited application, they are simple in theory and the required operations are easily performed, besides being to a great degree automatic when once set in operation. The platinum apparatus as supplied by the makers is somewhat expensive, but with the simple forms described below the writer has found it possible to make analyses which were strictly comparable as to accuracy with determinations simultaneously made with the use of more expensive apparatus.

For the electrolysis of a common metallic salt three things are necessary: (1) A means of generating the electric current; (2) a means of measuring the current; and, (3) a platinum surface upon which the metal may be deposited. To these may sometimes be added a means of reducing the current when a very weak current is necessary.

### GENERATING THE CURRENT.

Any of the common forms of battery may be used for this purpose, as the bichromate or bottle cell, the Leclanche, Bunsen, Grove, or some form of the Daniell, as the familiar gravity cell of the telegrapher. The storage cell is probably the most generally satisfactory, provided facilities exist for recharging. A half dozen of the common gravity cells will, however, be found sufficient to perform all the determinations ordinarily required. These may be had ready for setting up at a cost not exceeding 75 cents each, or, if the operator is fond of devising his own apparatus, may be cheaply constructed in the following manner:

For cells use tall quart or half gallon earthenware jars, or cut off the tops of half gallon acid bottles, of which there is generally a surplus about the store. For each jar obtain a strip of sheet copper about eight inches long and one inch wide. Roll the copper into a flat spiral and fasten to it a piece of copper wire long enough to reach to the bottom of the jar. The wire should be covered with a piece of rubber tubing to prevent corrosion. For the other element of each jar prepare a similar coil of sheet zinc, the heavier the better. To set up the battery place a copper coil at the bottom of each jar, cover the coil with crystals of sulphate of copper, suspend a zinc coil near the top of the jar by means of the wire which is attached to it, and fill the jar with soft water to the top of the zinc. Connect the several jars so that the zinc of one is joined to the copper of the next, and so on. A glance at the local battery of a telegraph office will make the arrangement plain.

For the electrolysis of iron and a few other metals it may sometimes be necessary to use a battery of higher electromotive force. Several Grove or Bunsen cells will generally answer for such cases.

### MEASUREMENT OF THE CURRENT.

This may be accomplished in several ways, but the simplest method is by measuring the volume of oxy-hydrogen gas released from acidulated water by the current in a given time. Dealers in electrical supplies furnish the familiar Bunsen voltmeter for this purpose at prices ranging from \$3 to \$8. A simple form of this apparatus which may be set up from materials to be found in every well equipped pharmacy has been constructed and used by the writer with very satisfactory results. There is needed a common burette, a tubulated bell jar, and two pieces of moderately heavy platinum wire. The bell jar may be improvised from a pint packing bottle by cutting off the bottom.

Through a sound cork which fits accurately the neck of the bell jar, or the neck of the bottle which serves as such, pass two stout platinum wires so that they project about one inch within the jar. Bend the ends of the wires which are to be within the jar into flat loops so that they shall face each other, about one half an inch apart, and without touching. Insert the cork tightly into the neck of the bell jar with the wire loops inside. Fasten the bell jar, open end up, with a burette clamp. Cover the platinum electrodes with a small glass funnel, and

invert over the stem of the funnel a burette, and fasten in this position by means of a clamp.

Half fill the bell jar with water acidulated with sulphuric acid, and by suction fill the burette to the highest mark. The voltmeter is now ready for action.

### THE PLATINUM SURFACE.

The next requisite is the platinum surface upon which the metal is to be deposited. For this may be used a platinum crucible, a platinum dish or the piece of apparatus next described which will be found to answer the purpose very well. A piece of platinum foil, moderately heavy, about four inches long by two inches wide, is bent into the form of an open cylinder. Near the top the cylinder is pierced with two holes by means of which it is to be suspended with a piece of platinum wire which hooks into the holes like the bail of a bucket. This cylinder which serves as the cathode or negative electrode, looks when finished like a small tin pail without top or bottom and open along the side. For the anode or positive electrode bend one end of a stout platinum wire, about eight inches long, into a flat spiral long enough to move up and down inside the platinum cylinder without touching.

### MOUNTING THE APPARATUS.

The apparatus is set up for work in the following manner: Through a good sized cork pass the straight end of the positive electrode just described and the end of the copper wire which leads from the zinc plate of the battery. The wires must not touch. Bend the end of the copper wire into a small hook and over this hang the ball of the platinum cylinder. The flat spiral of the anode is to be inside of the cylinder, near the bottom, but not in contact with it. Support the cork by a burette clamp or other means so that the cathode and anode hang inside a small beaker which is to contain the electrolyte. Connect the anode with one of the wires of the voltmeter and the second wire of the voltmeter with the copper wire of the battery. If the directions have been followed, there is a continuous path for the current from the platinum spiral, through the voltmeter, to the copper plate of the battery and through the battery to the platinum cylinder. When the electrolyte is poured into the beaker the circuit will be completed and the current will pass.

### THE OPERATION.

Let the first experiment be the examination of a specimen of copper sulphate. Make a solution of two grammes, or less, of the salt in 50 Cc of distilled water and acidulate moderately with nitric acid. Pour the solution into the beaker which contains the cylinder and spiral, and raise the beaker so that the cylinder is two-thirds immersed in the solution. This completes the circuit, as is shown by the bubbles of gas which arise in the voltmeter and by the red coating of copper which immediately begins to deposit upon the cylinder. Permit the current to pass for about ten hours, or until a fresh portion of the cylinder does not show a further deposit of copper when the liquid is raised in the beaker. The gas should be disengaged in the voltmeter at the rate of about 0.3 to 0.5 C.c. per minute. Without interrupting the current, siphon off the acid liquid, meanwhile passing in fresh water until the copper is well washed, remove the cylinder, dry and weigh. To obtain the weight of the film of copper, place the cylinder in dilute nitric acid until the copper is dissolved, dry and weigh the cylinder and subtract its weight from that previously obtained.

From the remainder, which is the weight of the copper, calculate the amount of pure salt taken for analysis.

The preceding experiment may serve as an example of the general method of determining electrolytically those metals which can be precipitated directly from their salts in the presence of free acids. Some elements as the halogens in their binary combinations, cannot be deposited upon the platinum electrode by the electric current, but may be determined indirectly in the following manner: Precipitate the halogen as its silver salt, i.e., as iodide, bromide or chloride, and dissolve the precipitate in an excess of alkali cyanide. Electrolyze the cyanide solution, and calculate the weight of the halogen from the weight of the silver deposited.

Other electro-negative elements and radicals may be determined in a similar manner, provided they can be obtained in the form of a definite compound with a metal which can be determined electrolytically.

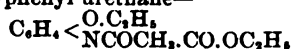
Among the substances which may be conveniently estimated by the electrolytic method are the compounds of mercury, silver, lead, antimony, tin, copper, cadmium, bismuth, iron, manganese, zinc, nickel, and cobalt. One very great advantage of the electrolytic over the ordinary gravimetric method is the fact that the presence of the radicals of organic acids, as oxalic, citric, and tartaric, does not usually interfere with the precipitation of the metals, and in some cases actually assists in their deposition. For this reason the method ought to give good results in the examination of the scale compounds of iron.

If much work is to be attempted some authority upon the general subject will be necessary. For this purpose the excellent little manual of Edgar F. Smith on "Electro-Chemical Analysis," or Herrick's translation of Classen's "Quantitative Chemical Analysis by Electrolysis" are available.

## Pharmaceutical Progress.

**Russian Fir Tar.**—This tar is obtained chiefly from *Pinus sylvestris* as a syrupy, reddish-brown liquid, of 1.085 sp. gr., containing an amount of acid varying from 2 to 5 per cent. The phenols it contains are guaiacol and its homologues (Nenki and O. Lieber, *Chem. Zeitung Report*, 18, 8).

**Thermodin**,  $C_{12}H_{11}NO_2$ , is acetyl para ethoxyphenyl urethane—



It crystallizes in needles, is free from smell and almost tasteless, melts at  $86^\circ-88^\circ$ , and is sparingly soluble in water. It is an efficient antipyretic, operating within an hour, and has been found useful in cases of influenza (*Merck's Bericht*, 1898).

**Mercurialis Annuæ**, L.—G. de Letter of Brussels considers that this plant properly collected, dried and preserved, constitutes an economical laxative medicine. Twenty to thirty grammes of the dried herb, in aqueous infusion is suggested as a proper dose or ten to twenty centigrammes of an alcoholic extract. A medical authority is also quoted to the effect that a decoction of the fresh herb possesses both laxative and diuretic properties (*Journal de Pharm. d'Anvers*, l., 30).

**Extract of Logwood.**—E. Donath finds that commercial extract of logwood contains a notable quantity of nitrogen in a soluble form, and that the ash is higher in proportion, and richer in chlorides and phosphates than it was in an extract

prepared by himself. These differences he attributes to the sprinkling of the logwood with putrid urine during the process of fermentation to which it is subjected, in order to convert the hæmatoxylin into hæmatin (*Chemiker Zeitung*, xviii., 277).

**Kosin or Koussin**—Max Leichsenring has re-investigated kouso flowers, and isolated a crystalline inactive body, protokosin, and an amorphous highly active substance kosotoxin; from the latter a yellow crystalline inactive body apparently identical with commercial kosin, could be obtained by boiling with hot baryta water, purifying and crystallizing. The author concludes that commercial kosin is not a natural constituent of kouso flowers, but is produced from one of the constituents during the process of isolation (*Archiv.*, cxxxi., 50).

**Iodocresol.**—Some iodine compounds of a new class, characterized by their capability of crystallizing, and freedom from color or smell, have been obtained by the firm of Bayer & Co. by operating upon phenols in dilute solution with limited proportions of caustic soda or alkaline carbonate. A solution of ortho-oxy-paratoluylic acid (meta cresotinic acid) in  $1\frac{1}{2}$  mol. of alkaline carbonate or 3 mol. of caustic alkali yields, when acted upon with iodine, triiodo cresol,  $C_6H_2I_3.OH$ , which is a substance sparingly soluble in alcohol or petroleum spirit, readily soluble in ether, benzene, chloroform, or fat oils. (*Pharm. Zeit.*)

**Preparation of Oxygen.**—M. Delamotte recommends pharmacists to prepare oxygen for medicinal purposes by allowing water to fall intermittently and in small quantities on sodium peroxide, the reaction being checked when necessary by mixing the compound with an equal quantity of sand. This method is said to give a pure product in a brief time. Dr. Bardet prefers to add water to a mixture of fifty grammes of barium dioxide with sixty of potassium permanganate. The gas thus rapidly given off in the cold contains a little ozone, but is said to be sufficiently pure to be respired (*Répertoire*, [3], vi., 54).

**Artificial Diamonds.**—H. Moissan deals with the results of his latest attempts to form diamonds artificially. Under various conditions he has been able to obtain a transparent black variety of carbon, certain specimens of which present a distinctly crystalline appearance. The density of these is between 3 and 3.5, they scratch the ruby, resist the action of potassium chlorate and fuming nitric acid, and burn in oxygen at a temperature near  $900^\circ$  to produce four times their weight of carbon dioxide, in all these respects according exactly with natural diamonds, which alone are known to possess similar properties (*Comp. rend.*, cxviii., 820).

**Ipecacuanha and Senega.**—A. Andrée calls attention to an admixture of undulated ipecacuanha root (*Richardsonia scabra*), with senega root, in a parcel sent out by a New York house, the ipecacuanha being present in a notable proportion. The senega root is described as not presenting identical characters with the official article, being harder, more fibrous, and not possessing generally the keel by which the root is usually recognized. Portions of stem attached to the root were colored violet. Andrée suggests that the roots may possibly be obtained from a distinct species of *Polygala*, growing in the same districts as the *Richardsonia* and collected at the same time as the roots of the latter (*Apot. Zeit.*, ix., 23).

**Carbonic Esters of Pyrocatechin and its Alkyl Ether.**—These compounds are obtained by v. Heyden by acting on pyrocatechin, its mono alkyl ether, or the methyl ether of homopyrocatechin with phosgen under pressure and in presence of an indifferent solvent, such as benzene—  
 $2C_6H_4.OH.OC_6H_3 \rightarrow \{ CO(OC_6H_4.O.C_6H_3)_2 \} + 2HCl$

The substances thus obtained are colorless, insoluble in water, soluble in alcohol or ether, and are distinguished from free phenols by their neutral reaction, the absence of corrosive action on the skin, and of taste or smell. They are, therefore, susceptible of useful application medicinally, as they are decomposed in the organism with elimination of the corresponding phenols.

**East African Gum.**—C. Hartwich reports upon a gum resembling tragacanth recently sent from East Africa. It differed from tragacanth in containing comparatively few pieces of the characteristic flattened shape of true tragacanth; the majority consisted of rounded or pear-shaped whitish masses; the gum swelled to a stiff jelly with two hundred times its weight of water, and was soluble only after prolonged boiling with much water. It appeared to consist mostly of bassorin, the formation of which began in the middle lamella, and proceeded to the primary and secondary deposits in the cell-wall. From the mode of formation of the gum, and the anatomical characters of the fragments of bark found in it, the conclusion was drawn that it was produced by a species of *Sterculia* (*Archiv.*, cxxxi., 43).

**Sapotin.**—This is the name given to a glucoside extracted by G. Michaud from the seed contained in the *Sapodilla* Plum, the fruit of *Achras Sapota*. This tree has a febrifugal bark, and diuretic and aperient seeds. The glucoside was obtained in minute crystals, melting at  $240^\circ$ . In alcoholic solution they are lævogyre,  $[\alpha]_D = 32.11$ . Sapotin is very soluble in water, less so in alcohol, and insoluble in ether, benzene or chloroform. Acetate of lead forms a gelatinous precipitate in an aqueous solution of the compound, the precipitate being soluble in excess of the reagent. The formula of sapotin is  $C_{27}H_{44}O_{11}$ , and when boiled with dilute sulphuric acid the compound decomposes, glucose and sapotiretin,  $C_{17}H_{28}O_{10}$ , being formed, the latter insoluble in water, but very soluble in alcohol (*Am. Chem. Journ.*, xiii., 572).

**False Sarsaparilla.**—C. Hartwich describes a false sarsaparilla from Jamaica, which has recently made its appearance in Hamburg. It consisted of cylindrical pieces of root measuring up to nineteen inches in length and three-sixteenths to three quarters of an inch in thickness, and brown or greyish brown in color. The larger pieces were covered with projections which proved to be small galls. The cortex of the root contained numerous schizolysigenous ducts, which were surrounded by a sclerenchymatous sheath, and in the earlier stages were filled with resin. The central column showed a very small pith, radial fibrovascular bundles and numerous resin ducts. The root was identified by these characters as a *Phlœdendron*, but the species could not be determined (*Archiv.*, cxxxi., 42).

**Creasote Pills.**—For obtaining very small creasote pills Fanel (*Rev. Pharm. de Gand*) recommends the use of a mass obtained by dissolving five parts of sugar in twenty-four of water and then adding eleven parts of gelatin. One part of this, used warm, is said to emulsify two parts



of creasote, and by the addition of licorice powder a convenient pill-mass may be obtained which contains a large proportion of the active ingredient. When creasote is prescribed in pillular form, together with tannin and iodoform, Violé (*Bull. de Pharm. de Bordeaux*) absorbs the first by means of animal charcoal, then adds the other ingredients, and finally masses the whole with turpentine. The charcoal is said to mask the taste of the creasote to some extent, and by rolling the pills in magnesia, silvering, or coating with tolu varnish it may be still further covered.

#### Salicylic Esters of Monochlor Phenols.

—Of the three isomeric forms of oxybenzoic acid, the ortho compound or salicylic acid is known to have the most decided antiseptic properties, while among the cresols the meta compound is the most powerful, and it was to be expected that the monochlorinated phenols would show similar differences. Karpow has, however, ascertained that the para compound is the most powerful of them. The salicylic esters of two monochlor phenols have been examined, with the result that the orthochlor salol (m. p. 58°) and parachlor salol (m. p. 71°) possess a much greater disinfecting power than salol. They are both colorless crystalline substances, insoluble in water but readily soluble in alcohol or ether. The solutions give with ferric chloride a reddish-violet coloration (*Pharmaceut. Zeitung*, xxxix, 81).

#### Simple Method of Sterilizing Water.

—M. Traube states that by mixing water with chloride of lime in the proportion of half a milligramme to 100 Cc, all micro-organisms present are destroyed within the space of two hours. Water abounding in bacteria, after having been thus treated, will be found perfectly sterile when tested in suitable culture media. The amount of active chlorine present is reduced within the two hours by about 9.1 per cent., and the remainder may be neutralized by the addition of sodium sulphite in sufficient amount. The addition of an excess would not be detrimental, as it would be soon converted into sulphate by the oxygen dissolved in the water. After treatment in this manner, water has a pure taste, and a perfectly neutral reaction. Whether pathogenic bacteria are completely destroyed by such treatment has not been exactly ascertained (*Zeitschr. Hygiene, etc.*, xvi, 149).

**Aseptic Hypodermic Solutions.**—At a recent meeting of the *Société de Thérapeutique* a communication was made by Drs. Berlioz and Duflocq, in which they described the methods adopted by them for administering medicines subcutaneously without risk of septic poisoning. The solutions are prepared under conditions of absolute asepsis and preserved in tubes of yellow glass, containing from two to four cubic centimeters each. The neck of each tube is drawn out to a tapering point and, after filling, sterilization is effected before closing in an autoclave or a vacuum apparatus according to the volatility of the liquid. When required for use the neck of the tube is broken off and the needle-point of the previously sterilized syringe is immediately introduced into the opening thus made. Full working details, with illustrations of the apparatus employed, are given by the authors (*Répertoire*, [3], vi., 49).

**Adulteration of Kouso.**—Professor Arthur Meyer and Hendrik Sandlund have drawn attention to the difficulty that at present exists of procuring kouso in bundles, and point out the fact that an

adulteration with male flowers can be more easily effected when the flowers are loose than when the whole inflorescence is packed in hanks. From an examination of commercial loose kouso, they have found that such an adulteration actually takes place to the extent of as much as 12 per cent. These male flowers are unexpanded; the sepals of the outer calyx are distinguished from the corresponding organs of the female flowers by a thick covering of short unicellular hairs. Occasionally the female flowers develop stamens, in which, however, no pollen is formed. The presence, therefore, of sepals with dense short hairs of pollen, and of the tissue of the filament in more than very small proportion, are sufficient to distinguish the male flower, either in the loose or powdered kouso (*Pharm. Zeit.*, No. 99, 1893).

#### Influence of Solvents on Germicides.

—That the liquids employed as solvents of carbolic acid sometimes affect its properties as a germicide has been demonstrated by several writers since Koch alluded to the matter in 1881. Recent experiments by P. Lenti, of the University of Naples, have demonstrated that absolute alcohol completely neutralizes the germicidal action of both corrosive sublimate and carbolic acid with regard to anthrax spores, and that a considerable proportion of water must be added before any germicidal action can then take place. Glycerin impedes the action of sublimate when less than forty per cent. of water is present, and of ten per cent. solutions of carbolic acid when they consist of less than eighty per cent. of water. Carbolic acid and lysol also lose their disinfecting property entirely when dissolved in olive oil. It would appear, therefore, that alcohol, glycerin and fatty bodies are unsuitable ingredients of liquid disinfectants (*Rev. d'hygiène*, through *L'union pharm.*, xxxv, 58).

**Essence of Lemon.**—V. Oliveri has examined the essential oil of *Citrus Limonum* and describes it when freshly prepared as neutral in reaction, not reducing ammoniated silver nitrate, of density 0.86 to 1.60, and having a specific rotatory power varying between  $[\alpha]_D = +69.75$  and  $72.10$  at  $16^\circ$ . It oxidizes in air, becoming faintly acid, and distills entirely with the vapor of water. By fractional distillation the oil was separated into three portions. The first (constituting one fifteenth of the whole) passed over at  $170^\circ$ – $170.5^\circ$ , and consisted of limonene,  $C_{10}H_{16}$ ; density at  $0^\circ = 0.8867$ ;  $[\alpha]_D = +66.82$  at  $16^\circ$ . It formed a tetrabromide,  $C_{10}H_{16}Br_4$ , and a dichlorhydrate,  $C_{10}H_{16}Cl_2$ . The second fraction (nineteenths of the total amount) distilled at  $176^\circ$ – $178^\circ$ , and also consisted of limonene; density 0.899;  $[\alpha]_D = +76.75$ . The third fraction distilled at  $240^\circ$ – $242^\circ$ , and is described as sesquimonene,  $C_{15}H_{24}$ , a viscid liquid of density 0.9847, optically inactive. This constituted a very small proportion of the oil and formed an uncrystallizable oily tetrabromide and a similar dichlorhydrate (*Gazz. chim. ital.*, through *Bull. Soc. Chim. de Paris*, [3], xii., 46).

**Aconitum Septentrionale.**—This plant closely resembles *Aconitum Lycoctonum*, but the flowers are blue or violet, sometimes white. It grows in Sweden and Norway, Northern Russia, and some parts of Austria. H. V. Rosendahl has obtained from the rhizomes three bases: 1. Lappaconitine,  $C_{21}H_{33}N_2O_5$ , in the form of hexagonal prisms, melting at  $205^\circ$ . A solution of the base in alcohol or ether has a reddish-violet fluorescence. When

heated with caustic alkalis lappaconitine yields to other bases and an acid. 2. Septentrionaline,  $C_{21}H_{33}N_2O_5$ , amorphous, melting at  $128.9^\circ$ , very soluble in alcohol or ether, and in 58 parts of water; has a bitter taste, and local anæsthetic action. Alkalies convert it into two other bases and a crystallizable acid, which gives a bluish violet color with ferric chloride. 3. Cynoctonine,  $C_{21}H_{33}N_2O_5$ , amorphous, melting at  $187^\circ$ , readily soluble in water or alcohol, but only in 1378 parts of ether. Mixed with fuming nitric acid and evaporated the residue becomes blood-red on adding alcoholic solution of caustic potash. Lappaconitine is colored yellowish-red by sulphovanadic acid, afterwards becoming green. Septentrionaline gives a cherry-red with furfural sulphuric acid (*Apotheker Zeitung* ix., 112).

#### Compounds of the Citral Series.

—F. Tiemann and F. W. Semmler describe the citral or geraniol obtained from lemon oil or lemon grass oil as an aldehyde having the composition  $C_{10}H_{16}O$ . It is nearly colorless, slightly soluble in water, but readily soluble in alcohol, ether or chloroform. It is optically inactive. The optically inactive geraniol,  $C_{10}H_{18}O$ , is the alcohol corresponding to citral, and it is convertible into citral by oxidation with chromic acid, while it can be reproduced from citral by reduction with sodium. Optically active alcohols of the formula  $C_{10}H_{18}O$  have been obtained by Eckart and Semmler—rhodinol, feebly lævo rotatory, from rose oil; coriandrol, a dextro-rotatory unsaturated alcohol, from coriander oil; linalool, auranliol, and lavendol from bergamot, petitgrain, and lavender oils; also nerolol, the lævo-rotatory unsaturated alcohol, from neroli oil. These optically active alcohols of the formula  $C_{10}H_{18}O$  all yield citral by careful oxidation. When citral is oxidized below  $0^\circ$  in acetic acid solution, with chromic acid it yields methyl heptylene ketone and a substituted glyceric acid, chiefly geranic acid,  $C_{10}H_{18}O_2$ , in the form of a colorless oil, readily soluble in alcohol, ether, benzene or chloroform. By destructive distillation citral yields carbonic acid and a hydrocarbon,  $C_8H_{14}$ , geraniolene, of 0.757 specific gravity at  $20^\circ$ , boiling at  $142^\circ$ – $143^\circ$  (*Berichte*, xxvi., 2706).

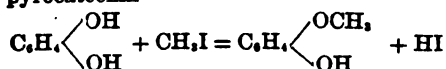
**Kapok-oil.**—Certain plants of the *Malvaceæ* resemble those classed under the title *Gossypium* (the true cotton plants) in possessing a filamentous covering on their seeds. Inferiority in mechanical properties, e.g., length and strength of fiber, prevents the use of this material for the same purposes as cotton. The best known of these plants is the *Kapok* (*Eriodendron anfractosum*, Dec., *Bombar penandrum*, L.), which grows in the Dutch East Indies; its cotton is used for stuffing beds and mattresses in place of horsehair. The seed itself is similar to cottonseed, in that oil can be expressed from it, such oil being used as a food, and for soap-making in Holland. As will be seen from the analytical constants obtained on the examination of the oil, it is of the same class as cottonseed-oil. The sample examined by the author possessed the following characteristics:

The oil was of greenish yellow color, and slight inoffensive smell and taste. It was viscous and turbid, becoming clear, however, on standing from the separation of stearin analogous to cottonseed stearin. When treated with sulphur chloride or sulphuric acid, Kapok oil evolves considerably more heat than cottonseed oil.—R. Henriques (*Chem. Zeit.*, 1893, xvii., 1283).

**Isoborneol.**—By heating camphor with a mixture of acetic acid and a small quantity of mineral acid, J. Bertram and H. Walbaum have obtained an ester having the formula  $\text{CH}_3\text{COOC}_{10}\text{H}_{17}$ , and by heating it with alcoholic potash they obtained a solid alcohol,  $\text{C}_{10}\text{H}_{17}\text{O}$ . It closely resembles borneol, but is not identical with it. From solution in petroleum spirit it crystallizes in thin feathery laminae, is readily soluble in alcohol, ether, chloroform, or benzene, and insoluble in water. It melts at  $212^\circ$ , and sublimes readily. It combines with chloral or bromal, forming well defined addition products similar to those obtained by Haller and Minguin with borneol. By treatment with dehydrating agents, such as zinc chloride isoborneol is readily convertible, with separation of water, into camphene. Boiled with nitric acid, or by the action of chromic acid, isoborneol is converted into a ketone,  $\text{C}_{10}\text{H}_{16}\text{O}$ , which cannot be distinguished from ordinary laural camphor. By reduction with sodium this camphor yields a mixture of borneol and isoborneol, just as laural camphor does, and both these forms of borneol yield by oxidation the same camphor. The borneol of commerce was ascertained to be a mixture of borneol and isoborneol. The above described conversion of camphor into an acetic ester and then into isoborneol is turned to account for the detection of camphor in essential oils. In this way the authors have found camphor in citronella oil, ginger oil, kesso oil from Japanese valerian root, and oil of camphor. When pinene is present in large amount some difficulty arises in the application of this method from the hydration of this terpene to terpineol, which has about the same boiling point as isoborneol, and is capable of holding in solution a large proportion of isoborneol (*Journ. prakt. Chem.*, 49, 15).

#### Guaiacol.

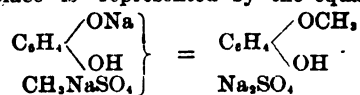
This constituent of beechwood creasote was formerly described as a liquid until Behal and Choay obtained it in a solid crystalline state (*Pharmaceutical Journal*, lii., 805). It is now prepared synthetically by the reaction of methyl iodide with pyrocatechin—



Merck (*Bericht*, 1893) describes the product as melting at  $33^\circ \text{C}$ . and boiling at  $205^\circ \text{C}$ . A one per cent. alcoholic solution mixed with a few drops of two per cent. solution of ferric chloride and dilute hydrochloric acid becomes immediately blue, then green and yellow. The amount of guaiacol in the commercial article known by this name does not appear to be more than about 30 per cent.

#### PREPARATION OF GUAIACOL.

By fractional distillation of commercial guaiacol the portion passing over between  $200^\circ$  and  $205^\circ$  is a colorless refractive liquid which still contains an admixture of cresols. Guaiacol may, however, be obtained chemically pure by heating equal molecular proportions of pyrocatechin, the sodium salt of methyl sulphuric acid, and caustic soda. The reaction taking place is represented by the equation—



Thus prepared guaiacol is a white crystallizable substance, melting at  $28^\circ.5$  and boiling at  $205^\circ$ .

Hitherto the production of pyrocatechin has been too costly for practical applica-

tion of this method, but it is now obtainable from derivatives of benzene, or toluene, as the other isomeric dioxybenzenes, resorcin, and hydroquinone have been obtained. By acting upon paraoxybenzoic acid—prepared by treating sodium phenol with carbonic acid—with bromine it is converted into bromoparaoxybenzoic acid, the bromine taking the ortho position relatively to the hydroxyl group. On melting this product with caustic soda, sodium pyrocatechin is formed, which is the material required for the preparation of guaiacol.

Another method is that of Baum, who starts with metaoxybenzoic acid obtained from chlorinated toluene. The mixture of benzal chloride and benzene trichloride is heated under pressure with lime, and thus the benzal chloride is converted into benzaldehyd, and the benzene trichloride into benzoic acid. By treatment with sulphuric acid metasulphobenzonic acid is formed, and by melting that with alkali it is converted into metaoxybenzoic acid, the sulpho group being replaced by a hydroxyl group. By dissolving the metaoxybenzoic acid in carbon tetrachloride and adding bromine, parabrom-metaoxybenzoic acid is formed, and by heating this under pressure with caustic soda the sodium salt of protocatechuic acid is formed, which by further heating passes into sodium pyrocatechin.

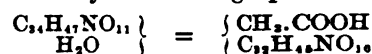
According to a third method of Baum's, alpha-phenol-disulphonic acid is melted with caustic soda and the pyrocatechin sulphonic acid so produced is converted into pyrocatechin by heating with dilute mineral acids. Chemically pure guaiacol is described by Seifert as having a melting point of  $32^\circ$ . It retains the liquid condition at  $-2^\circ$ , but immediately solidifies when a crystal is dropped in, the temperature rising to  $27^\circ$ . The specific gravity of guaiacol in a state of superfluidity is 1.149 at  $15^\circ$ , and by the addition of a few drops of water or alcohol it retains the liquid state longer. The boiling point is  $204^\circ$ – $205^\circ$ .

Liquid guaiacol mixed with twice its volume of pure sulphuric acid gives a colorless solution. Mixed with an equal volume of caustic soda (sp. gr. 1.3) it forms a clear solution, which rapidly solidifies to a crystalline mass. It mixes with twice its volume of glycerin (sp. gr. 1.19) without alteration of volume, and dissolves in eight times its volume of petroleum spirit, while ordinary commercial guaiacol requires only four times its volume for solution (*Pharm. Centralh.*, xxxv., 97).

#### Aconitine.

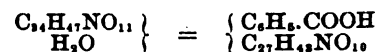
Freund and Beck have arrived at results in reference to the constitution of this base which introduce fresh discrepancies. It is stated that the investigation was commenced by Freund in 1891, and afterward discontinued for a time in consequence of his learning that A. Ehrenberg was engaged upon the same inquiry. The chief points to which attention is directed are the formula of aconitine and the products of its alteration. The results obtained by the authors in the analysis of the base approximate to the values calculated from Wright's formula for apoaconitine,  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , but they prefer to adopt a formula differing from those arrived at by Wright and by Dunstan chiefly in containing an additional atom of carbon, either  $\text{C}_{28}\text{H}_{42}\text{NO}_{11}$ , or  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , because it is more in accordance with the data obtained by analysis of the salts and with the products of alteration. By long continued boiling, Ehrenberg and Purfürst obtained from aconitine a crystalline product which they

regarded as a mixture of two bases in the form of benzoates. Freund and Beck find that it is an individual substance, melting at  $202^\circ$ – $203^\circ$ , for the basic constituent of which they give the formula  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , and they represent its formation from aconitine by the following equation—

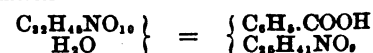


and they refer to the formation of acetic acid as having been already indicated by Ehrenberg and Purfürst (*J. p. Ch.*, xlv., 606).

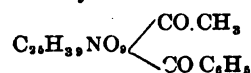
From examination of the amorphous base thus formed, of its crystalline benzoate, hydrobromide, and hydrochloride, they infer that it is identical with the substance to which Dunstan gave the name of "isaconitine," but they state that its composition is not correctly represented by the formula  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , and that it is not an isomer of aconitine, but probably the substance to which Wright assigned the formula  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , under the name of "picroaconitine." As the identity of isaconitine with that base has been established, Freund and Beck consider that the base they have obtained from aconitine by elimination of acetyl is picroaconitine, and they propose to revert to that name, altering Wright's formula to  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ . The attempt to reproduce aconitine by acetylation of picroaconitine has hitherto been unsuccessful, the product being a crystalline substance of a different nature. The benzoic acid in the salt resulting from the hydrolysis of aconitine is attributed to another simultaneous mode of alteration, represented by the equation—



The other product of this change has not been isolated, as it appears to hydrolyse and readily break up into acetic acid and the compound  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , which is also stated to be produced by the action of boiling alcoholic potash upon picroaconitine, as shown by the following equation—



From the characters of this base it is considered by the authors to be identical with the substance to which Wright gave the name of aconine, but they state that the formulae given by him, and subsequently by Dunstan, do not correctly represent its composition. The general result arrived at by Freund and Beck is that aconitine is represented by the formula  $\text{C}_{27}\text{H}_{41}\text{NO}_{11}$ , and that its constitution is acetyl-benzoyl-aconine—



The authors state that they intend shortly to publish a more extended account of their investigation, and they hope it may give rise to a discussion that will clear up the differences between their results and those obtained by Dunstan and his colleagues (*Berichte*, xxvii., 433).

**Action of Sodium upon Water.**—The cause of the violent explosion taking place when water is decomposed by sodium has not been clearly ascertained. As the result of some inquiry into this subject, M. Rosenfeld has come to the conclusion that a compound of sodium and hydrogen is formed, the sudden dissociation of which is the cause of the explosion (*Journ. prakt. Chem.*, xlviii., 599).

## On an Imperial "British Pharmacopœia."\*

By PROFESSOR ATTFIELD, F.R.S.

The British Pharmacopœia is produced under the medical acts of 1858 and 1862, the duty of providing for its compilation, and of deciding as to the necessity for, and the date of, any fresh edition being placed by the legislature on the general council of medical education and registration of the United Kingdom. For such initiation a medical body is, clearly, the most fit, especially when the actual compilation is carried out by pharmaceutical in addition to medical experts.

The current pharmacopœia is a condensation of the prior pharmacopœias of the three countries, namely, the London Pharmacopœia (1618, 1650, 1677, 1721, 1746, 1788, 1809, 1824, 1836, 1851), the Edinburgh Pharmacopœia (1699, 1722, 1736, 1756, 1774, 1792, 1803, 1807, 1809, 1818, 1817, 1839, 1841), and the Dublin Pharmacopœia (1807, 1818, 1826, 1850)—possibly others, some, perhaps, reprints—together with additions made in the resulting conjoint pharmacopœia, or British pharmacopœia (1864, 1867, 1885, and addendum of 1890).

Now, my conception of a true British Pharmacopœia has always been what, for convenience of description and discussion, may be termed an *Imperial* British Pharmacopœia—as useful in the remotest corner of the Queen's dominions as in the center of London; a national medicine book of which, as of the empire, it might be said, but without boasting and as simply expressive of its silent, never-ending usefulness, "the sun never sets on its might." In 1886 that conception ripened. The present pharmacopœia had been published in the autumn of 1885, and one year after the editorial duties of myself and colleagues, Professors Redwood and Bentley, had ceased. I was requested by Pharmacopœia Committee of the Medical Council to advise the council as to any procedure that might be desirable to secure satisfactory future revisions. The reply to this request, dated November 1, 1886, was printed and circulated among the members of the council, and, it may be added, has been acted on in its entirety by the council. It was two-fold, and related (a) to the official recognition of pharmaceutical research; (b) to imperial extension. It is necessary to deal with the former of these two subjects before reverting to the latter.

The first (a) of the two suggestions whereby the due pharmaceutical efficiency of the next British Pharmacopœia might reasonably be expected to be promoted was that annually there should be prepared for and presented to the Pharmacopœia Committee of the Medical Council, a printed "Report on the Progress of Pharmacy in its Relation to the Future Revision of the British Pharmacopœia of 1885," that is to say, a report on any and every original research, or published experiment, or suggestion relating to any one of the thousand or so articles, or sections, or monographs, of the pharmacopœia—the number is now (1894) 1,008 if the articles of the appendix and the addendum be included—or on the arrangement or classification of the contents of the volume or on its nomenclature, systems of weights and measures, and so on; the report to include the reporters' own views, and his comments on suggested omissions, additions or alterations. The

writer had the honor of being appointed the reporter, and his seven annual reports have been accepted and printed by the Medical Council from year to year. The first for 1886 covered rather more than one year, namely, from the date of publication of the pharmacopœia in September, 1885, to the end of December, 1886. The eighth, for 1893, will be presented at the approaching spring meeting of the council in May, 1894. The arrangement of the contents of the reports is alphabetical, like that of the pharmacopœia itself, hence future reference will be easy, especially if, as may be hoped, there should be added, in due time, a single general index to all the reports issued during the life of the present edition of the pharmacopœia. Each paragraph of each report has full reference to the volume and page of the weekly journal containing the original research, experiment, or suggestion. In many case subjects have not been reported at the year's end, but when the papers upon them or the correspondence respecting them have been more or less completed. A stock of these annual reports has been retained at the offices of Medical Council—sufficient in number for each member of future compiling committees, medical and pharmaceutical, to be supplied with an indexed, interleaved bound set but insufficient for any further distribution. A set so far is already in the library of the Pharmaceutical Society in London. A similar set as far as published is now presented to the library of the society in Edinburgh. By this "reporting" plan the labors of original workers will more readily be recognized and the duties of compilers *pro tanto* be facilitated.

\* \* \*

To turn now to the discussion of the character of the next British Pharmacopœia in its home editorial aspects, a discussion which it is intended that this paper shall initiate; all views, it may be stated once more, of course, being subject absolutely to the controlling voice of the Medical Council and the Pharmacopœia Committee.

Clearly it would be unwise to alter the nomenclature of the present pharmacopœia in any important respect. In the recently issued pharmacopœia of the United States the Latin nomenclature of the previous edition is retained, while there is a half-and-half alteration of the English nomenclature.\* For instance, *Magnesi Sulphas* and *Tinctura Opii* appear in that old dress which, let us hope they will long retain. While, however, under the leading title *Tinctura Opii* there appears the leading English title *Tincture of Opium*, which also is a translation, under the leading Latin title *Magnesi Sulphas*, there appears, not the translation of those words, namely, *Sulphate of Magnesium*, but, in a single line in type of Egyptian blackness, *Magnesium Sulphate*, and so on with the galenic and the chemical nomenclature. Here is a sacrifice of the advantages of translation and of literary elegance to mere "up-to-date" chemistry and its will-o'-the-wisp nomenclature. Scientific chemists claim the right to alter their views of the chemical constitution of matter as often as may be desirable; to substitute one crutch, or rather hatpeg, of hypothesis or theory for another whenever the advancing strides of their science may render such a course expedient; to change notation in accordance with their views wherever the conjoint wisdom of the fol-

lowers of chemistry erects a guide post; and to give new consistent names to formulae. But the pharmacist and the medical practitioner, and the writer as a professional anxious guide of both, should place in the front rank of the qualifications for a name not supposed constitution, which is here to-day and gone to-morrow, but permanence—a name which shall, if possible, be unambiguous, contain no numeral syllables, be recognized throughout the empire, and possess the very minimum of instability. Chemistry is unfortunately splitting off from pharmacy. Chemists have arisen other than chemists and druggists, and "chemists and druggists" are growing up who are not the former, or scientific "chemists," but "pharmacists" alone. Better, perhaps, accept what appears to be the inevitable and be content with the name "pharmacist," but therewith let us take as our motto, "Pharmacy for the Pharmacists." Pharmacists should have their own nomenclature, which while not inharmonious with the frequently-changing nomenclature of chemistry shall have the prime virtue of all possible permanence. Few British medical practitioners or pharmacists will sympathize with this recent action of the compilers of the otherwise highly improved Pharmacopœia of the United States. Let us trust that we shall retain in our next British Pharmacopœia both the Latin and English leading chemical names of the present edition as a rule, with perhaps no so-called indeclinable substantives.

The writer's views respecting official synonyms, more especially those which tend to remove difficulties and uncertainties respecting the composition of what may be termed household remedies, have been set forth in the pharmaceutical press, and so far have been strongly supported. The Pharmaceutical Pharmacopœia Committee may be trusted to give a practical outcome to the matter. The subject is wide in itself and in its bearings, but is, perhaps, fairly focussed in the Reports for 1887, 1888, 1889, and 1890.

Respecting official weights and measures pharmacists would much help by discussing the question of the substitution of grains by measure—that is "fluid grains" or "grain-measures" for minims. We use ounces (ozs.) and fluid ounces (fl. ozs.); why not grains (grs.) and fluid grains (fl. grs.), the minim gradually, in the course of years, dropping out of use? Viewed in the light of variation in doses, the subject has not apparently much therapeutic importance, and its legal bearings are not insuperable; but its pharmaceutical importance is considerable in its relation to the question of accuracy in compounding solutions and in dispensing, and as promoting simplicity of relationship of weights to measures. In the "Year Book of Pharmacy," 1889, p. 498, will be found a series of formulae for official *liquores*, in which 1 part by weight of active principle is contained in 100 similar parts by measure—for example, 1 ounce of arsenic in 100 fluid ounces of solution, or 1 grain in 100 fluid grains. In the technical language of pharmacy these are true "1 per cent. solutions" because of the implied practice which never need be abandoned—namely, "solids by weight, liquids by measure." Where the words "one per cent." are not qualified by something expressed, something understood, or an implied practice then, of course, the words "one" and "per cent." must, by the ordinary laws of language and logic, apply to the same thing or condition and not to dissimilar things or conditions. A solution containing 1 grain in 100 minims is scarcely an equally techni-

\* Condensed from a paper read at an evening meeting of the Pharmaceutical Society of Great Britain.

\* See Professor Attfield's letter in the October 26 number of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

cally true one per cent. solution and certainly not an equally simple technical one per cent. solution. An editor must not yet express a decided opinion on the question of the abolition of the minim.

But a still more important question relating to official weights and measures is the growing demands on our attention of the metric decimal system. This is now practically the sole system in the United States Pharmacopœia. Our colonists in Canada must largely use that pharmacopœia; and it may be expedient to give them official formulæ on the metric system. We must, of course, assume that the medical practitioners and pharmacists of the old country, at least, would not at present accept a pharmacopœia on the metric system alone. Cannot those monographs of our current pharmacopœia, which include weights and measures on the imperial system, be followed in every case by formulæ on the metric system? Sometimes it will only be necessary to repeat the lines containing the quantities, the directions applying to either system; sometimes the directions will admit of adaptation to either system; sometimes the paragraphs of directions in terms of the imperial system will also have to be repeated in terms of the metric system. The book need not be increased materially in size by such an extension of matter, for the "spacing," at least, might be less liberal than at present. It is not at present desirable further to enter on this question, for necessarily it must be fully discussed in the colonies and India, as well as at home.

Colonial and Indian additions to the pharmacopœia have been mentioned. Considering the activity exhibited in the search for and in the making public of new drugs during the past 20 years, additions of many really new drugs cannot be expected. The question of home additions is important for medical consideration, but is one on which pharmacists may be able to supply some information to medical authorities in regard to the frequency or infrequency with which the more firmly established "new remedies" are prescribed. Here attention may be drawn to the following paragraph in the preface of the new pharmacopœia of the United States: "In accordance with the positive instructions of the convention those of the new synthetic remedies which cannot be produced otherwise than under patented processes, or which are protected by proprietary rights, were not admitted into the pharmacopœia."

The younger workers at original pharmaceutical investigation will not accuse the writer of merging editor in professor, nor the older of merging editor in reporter, if he ventures to beg them to continue to experiment—experiment—experiment. There is dignity as well as definiteness in the words "pharmaceutical research;" and it is on accurate pharmaceutical research, properly so called, from a simple observation to an elaborate investigation, far more than on strictly chemical, physical, or botanical research, that the position which pharmacists have won for themselves in the production of the pharmaceutical portion of our pharmacopœia can be maintained; it is on published accurate pharmaceutical research, in the main, that the pharmaceutical basis of future Imperial British pharmacopœias can be constructed satisfactorily.

#### COD-LIVER OIL WITH SACCHARIN.

[Wiener Klinische Rundschau.]

Saccharin.....	40 cgm.
Acetic ether.....	1 Gm.
Cod-liver oil.....	10 Gm.
Peppermint or cinnamon oil.....	q. s.

#### PRACTICAL PHARMACY.

The following notes on incompatibilities are selected from a series of papers read before the Edinburgh Chemists', Assistants', and Apprentices' Association on January 31, 1894.

#### Citrine Ointment and Liniment of Lime.

BY W. F. MARTIN.

The author had recently dispensed an ointment consisting of equal parts of citrine ointment and liniment of lime. In twenty-four hours the ointment was distinctly darkened in color. With some ointments the change took place very rapidly. The object was to find out the cause of this blackening. It was thought it might be due to the presence of mercurous salt in the ointment and precipitation of mercurous oxide by the calcium hydrate. The solution of mercury in nitric acid for the ointment was made in strict accordance with the official directions, and on being tested there was no evidence of mercurous salt. With this the ointment was made very carefully as officially directed. The product, when tested, indicated a small proportion of mercurous salt, showing that reduction had taken place. It was found that olive oil did not reduce the mercuric salt, but lard, both in the fresh and rancid state, did so distinctly. The finest lard was employed. Although there is excess of olive oil in the liniment of lime, complete saponification does seem to take place, and there is a small quantity of free calcium hydrate present. The blackening of the ointment is therefore due to the precipitation of black mercurous oxide by the free calcium hydrate.

#### Calomel and Potassium Bromide.

##### A DANGEROUS INCOMPATIBILITY.

BY L. N. THOMPSON.

The paper dealt with the following prescription, which has been written for a child:

Potass bromidi.....	grs. x
Calomel.....	grs. iiii
Ft. pulv. mitiales xii.	

As soon as the ingredients are rubbed together in a mortar the mixture begins to darken, and if water is added the powder instantly becomes grayish black. It was found that if the potassium bromide was powdered and then dried so as to remove interstitial moisture before being mixed with the calomel, there was no darkening, but the same change took place instantly on the addition of moisture. It was thought that the presence of carbonate or free alkali in the bromide might cause formation of black mercurous oxide, but on testing with phenolphthalein and litmus it was found that the salt was quite neutral. After adding water to a quantity of the mixed powders it was sublimed, and the sublimate contained distinct globules of metallic mercury. The mixed powders were shaken up with water and filtered. On acidifying the filtrate and warming with copper foil metallic mercury was deposited, indicating a soluble salt of mercury. On shaking up with ether and evaporating the ether, mercury was found in the residue indicating a mercuric salt. On adding solution of strychnine hydrochlorate to the aqueous solution a dense white precipitate separated, indicating the double salt,  $\text{HgBr}_2 \cdot 2\text{KBr}$ , analogous to Meyer's reagent,  $\text{HgI}_2 \cdot 2\text{KI}$ . The darkening is therefore due

to the separation of metallic mercury from the calomel, and is explained by the following equation:



The prescription therefore is an example of a dangerous incompatibility, as the mercuric salt formed is a powerful poison. There is no method by which the decomposition can be avoided, and calomel and potassium bromide should never be prescribed together.

#### Calomel and Tincture of Iodine.

BY L. N. THOMPSON.

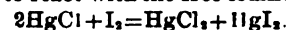
The following prescription was the subject of inquiry:

Tinct. iodi.....	ʒi
Calomel.....	grs. xx

This curious prescription had been ordered and directed to be painted on a glandular swelling on the neck. What the prescriber desired seemed difficult to understand. On adding the calomel to the tincture of iodine the latter was nearly decolorized, and the calomel became of a bright red color. The decomposition was investigated and explained as follows. The calomel and potassium iodide react thus:

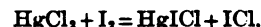


The free mercury was seen to separate and change to green iodide, and ultimately red iodide. One fluid ounce of tincture contains eleven grains potassium iodide, and this reaction therefore uses up 7.8 grains of the calomel, leaving 12.2 grains to react with the free iodine, thus:



One fluid ounce of tincture contains eleven grains of iodine. 12.2 grains calomel contain 0.4 grains of mercury. One-half is 5.2, and requires 6.6 grains iodine to form  $\text{HgI}_2$ , leaving 4.4 grains of iodine still free.

In the first reaction 3.8 grains of mercury are set free. This requires 4.2 grains of iodine produce to form  $\text{HgI}_2$ , leaving 0.2 grains iodine still free. When the reaction was completed the free iodine was determined volumetrically with the result that one fluid ounce contained 0.24 grain, thus confirming the above explanation. The bottle then contained a solution of mercuric chloride and mercuric iodide with a little free iodine and a precipitate of mercuric iodide. It has been found that on standing a further decoloration ensued, and probably the following equation explained how this came about:



On adding iodine to solution of mercuric chloride a yellow precipitate formed and gradually changed into a crystalline red precipitate. There was no evidence of free chlorine, and the above equation showing the formation of iodochloride of mercury known to occur in yellow rhombic crystals which change to tetragonal red crystals, and monochloride of iodine, may explain the further decoloration, but this was not proved. He had been assisted and guided by Mr. Hill in carrying out the experimental work for this paper and the previous one.

**A New Salol Reaction.**—To a small quantity of salol contained in a porcelain dish add concentrated sulphuric acid. It will turn yellow, brown and finally green. Now add water and stir and the mixture will turn red, but will again become greenish if ammonia is added. When resorcin is so treated a dark blue color first appears which on addition of water turns red, to again become blue on the addition of water.



## Observations on Some British Pharmacopœial Preparations.

BY E. W. LUCAS, PH.G.

The following suggestions for additional tests and descriptions, which the author is of opinion might be usefully included in the next British Pharmacopœia were communicated to the Pharmaceutical Society of Great Britain at an evening meeting on Wednesday, February 14.

**Aloes.**—No chemical test is official for distinguishing between the two varieties of aloes. Cold nitric acid produces a fugitive red color when added to powdered Barbados aloes, while Socotrine aloes, when so treated, gives no coloration until warmed, when it turns reddish brown. Also—it might be added—the surface of hepatic aloes is invariably covered with minute wrinkles, and the odor of either variety becomes much more marked if gently breathed upon.

**Balsam of Tolu** is occasionally mixed with common turpentine, but its presence may be readily demonstrated if, after adding strong sulphuric acid to the suspected sample, sulphur dioxide is given off, accompanied by blackening—whereas pure balsam only turns cherry red.

**Buchu**—Although it is mentioned that buchu leaves are marked on their margins with oil glands, yet stress might be laid on the fact that one gland is situated on each serrature, and especially one at the apex. *Empleurum serrulatum*, which somewhat resembles *Barosma serratifolia*, has no gland at the actual apex.

**Catechu and Scammony.**—The percentage of ash yielded by these substances is not specified. Catechu is required to be entirely soluble in boiling water. This it rarely, if ever, is, a more or less turbid mixture being generally produced. Some impurity is invariably present, and it would be well to limit the ash to 6 per cent., as is now done by the German Pharmacopœia. Scammony is notoriously adulterated; even the prefix "virgin" is not always a guaranty of its purity, and the limit of ash would be an additional safeguard, 3 per cent. being looked upon as the maximum.

**Poppy Capsules.**—When poppy capsules are used for extract and for syrup they are directed to be freed from the seeds. Should not this direction be extended to the decoction? As it stands the capsules are ordered to be bruised, which implies that the seeds are to be used as well. It is, I know, urged by some that a little of the oil is removed from the seeds and remains suspended in the mucilaginous liquid. This may be so to a small extent, but I think it must be a very small one, and it seems doubtful if any special therapeutic value can be accredited to it. Moreover, poppy capsules are so often broken in storage and transit that most of the seeds escape, and frequently the decoction is prepared with anything but the fair percentage that belong to a capsule.

**Digitalis.**—Everyone knows the difficulty experienced at times in distinguishing broken specimens of dried leaves. Digitalis, for instance, is common in certain parts of the country, and many pharmacists no doubt have the leaves collected and dried under their own supervision. This is as it should be, but unfortunately it cannot always be done; and then one has to fall back on dried material, obtained as a rule in a more or less broken and crumpled condition. Under such circumstances, a detailed acquaintance with the leaf is desirable, and it might usefully be noted that in foxglove leaves the veins run well down into the petiole, thus distinguishing them at once from numerous

possible substitutes, including the not uncommon one of *Inula Conyza*.

**Plasters.**—In several of the official plasters curd soap has been substituted for hard soap, and I have to strongly advocate a return to the latter. According to Dr Paul, powdered curd soap contains from twice to three times as much water as most other soaps, and whether it is due to this fact or not, certain plasters made with it are not as easy to roll into sticks as they were formerly. *Emplastrum plumbi* and *emplastrum resinæ* are notable examples of this alteration for the worse. I also have to suggest the addition of a little rubber to the principal bases, to counteract the tendency to crack when kept spread. A process involving little trouble is to dissolve the rubber in chloroform and anhydrous wool-fat, in a wide-mouthed bottle, fitted with a long upright condenser, applying just sufficient heat to keep the mixture gently boiling; one part of rubber and two parts of wool-fat are good proportions. The semi-fluid mixture should not be added to the other ingredients until nearly cool, when if well stirred, the chloroform is soon dissipated. A little extra care has perhaps to be taken in the manipulation, as if a heat much exceeding 200° F. is used to melt the plaster, the rubber has a slight tendency to come out in lumps. This, however, is no disadvantage, as every practical plaster spreader is much too wise to use a greater heat than that afforded by a water-bath. I have here *emplastrum ferri* and *emplastrum picis*, to which only half per cent. rubber and one of wool-fat were added, and yet they are at this length of time still sufficiently pliable to admit of being rolled up and sent out in a cylindrical case without cracking, an operation to which few, if any, pharmacopœial plasters would submit to half an hour after solidification had taken place. Rubber is now so extensively employed by large plaster spreaders that no serious objection is likely to be lodged against its introduction, particularly as the quantity would be so small.

**Extracts.**—The solid extracts are mostly ordered to be evaporated to a suitable consistence for forming pills, or else to the consistence of a soft extract. This leaves a good deal to the discretion of the operator. If an extract is to be really of a consistence for pill making it must be hard indeed; as a fact very few extracts could be made into pills without the aid of some addition, and they are very rarely so prescribed. Would it not be better to order all the solid extracts to be evaporated to a soft consistence, say that of fresh honey, for it is obvious that both requirements cannot be complied with. With regard to those intended for pill making, it has been my own experience that the official ones are better evaporated fairly low down, and while still warm sufficient finely sifted althea or sugar of milk stirred in, to bring the whole up to pillular consistence when cold. An ordinary extract requires about 10 per cent. of moisture to be driven off, and replaced with an equivalent quantity of some inert powder to effect this. There are however three—the extracts of colocynth, rhubarb, and cascara—which even if treated as described are a constant source of trouble to the dispenser. These, it is suggested, should be evaporated at a proper temperature to dryness, and either be brought up to weight or kept as "species," the equivalent of which is to be used instead of the soft extract.

**Extract of Nux Vomica and Opium.**—These are both adjusted to definite strengths, the finished product varying considerably in consistence, which alters

still further on prolonged keeping. This renders the standardizing abortive, and it is suggested that these two also should be evaporated to complete dryness, and adjusted with sugar of milk.

**Extractum Belæ Liquidum** already contains about 20 per cent. of rectified spirit, but it is insufficient to prevent the tendency to decomposition during very warm weather. In hot climates it is a common practice to add a little chloroform or salicylic acid to preparations whose keeping properties are not of the best, but I doubt if such a procedure is admissible in England, although on some of our summer days the thermometer may register an almost tropical temperature.

**Extractum Cinchonæ Liquidum.**—Our present process for this liquid extract is undoubtedly a vast improvement over the old method of exhaustion with distilled water, but even now the alkaloids are only partially removed, and serious loss, with consequent increase in the cost of production, is the result. After several trials I have found that the best results are obtained by percolating at an elevated temperature. The apparatus employed is simply an ordinary percolator provided with a hot water jacket, and can easily be fitted up in any laboratory. The coarsely powdered drug is moistened and packed in the percolator, the hot menstruum being poured on until the liquid begins to drop, when the orifice is closed and the whole allowed to macerate at a temperature of about 150° F. for twenty-four hours, when percolation is allowed to proceed (still maintaining the temperature) until solution of soda ceases to cause a precipitate with the droppings. The percolate is afterward evaporated on a water bath and standardized in the usual way. Working on small quantities I have found that each pound of bark requires about four pounds of the B. P. menstruum for exhaustion, although operating on a large scale this quantity could probably be reduced. The comparative value of the two processes will be seen by the following: Two pounds of powdered red cinchona bark, practically containing five per cent. of total alkaloids, was divided into two equal portions. One half was exhausted by hot percolation, the second by the B. P. process. In the first instance the standardized product was as nearly as possible sixteen ounces, in the second only a little over thirteen ounces, although it had been percolated by the full amount of liquid ordered, followed by an additional four or five pints of water. These facts appear to indicate a temperature of about 150° F. as the most suitable for complete extraction, with a reduction in the volume of menstruum and consequent shortening in the time of evaporation and exposure.

**Liquorice Root (Dried).**—This may be used in either the peeled or unpeeled condition. Would it not be well to insist on its being peeled, as if the cortical portion which contains an acrid principle is included the sweetness is somewhat impaired?

**Rhamnus Frangula** bark is ordered to be kept for at least one year before being used. Should not this direction be extended to cascara sagrada? It has been stated that extract made from seasoned bark is not only less bitter, but is less liable to disagree with the patient.

**Glycerin of Starch** was, I believe, introduced by Mr. Schacht some thirty years ago under the name of "Plasma." His original formula, which was practically adopted by the 1867 pharmacopœia, produced a fairly stiff translucent jelly, but now that one-third of water is sub-



stituted for an equal volume of glycerin, the product is too soft to answer the same purposes the old one was fitted for; moreover it has a great tendency to separate after being kept a short time. If made with glycerin alone the plasma does absorb moisture from the atmosphere, and a little water may be an advantage, but 83 per cent. appears far too much.

*Guaiacum Resin* is occasionally adulterated with pine resin. This sophistication may, however, be detected, if a terebinthinate odor is exhaled when thrown on burning coals, or if the precipitate caused by the addition of caustic potash solution to the tincture remains undissolved in excess of the alkali.

*Infusions.*—Bruised leaves are ordered to be used in making infusion of bucku, and the rhizome in No. 20 powder for infusion of serpentary. In the case of the first-named a mucilaginous liquid is produced, the viscosity of which at times may be so magnified as to render straining almost an impossibility; while the infusion when so made is much more liable to suffer rapid decomposition. In the case of the second, if serpentary infusion is made with bruised material, the hot water takes up an appreciable amount of starchy matter, the result being that if prescribed with tincture of iodine, as it frequently is, a turbid blue mixture is produced, owing to the fixation of the iodine, which is hardly what the prescriber intends. Under these circumstances it would appear advantageous to omit the directions for bruising either drug when ordered to be infused with boiling water.

*Rhubarb* in powder may be adulterated with turmeric, and it would be useful if a test were inserted for its detection. Perhaps as good a one as any is to add a little saturated solution of boric acid to a weak tincture of the suspected powder, when a brown coloration ensues if turmeric is present.

*Sodium Arseniate* contains more than half its weight of water of crystallization, part of which may be lost if the salt is exposed, the effloresced salt then containing a varying proportion of water. The anhydrous salt on the other hand is stable and easy to store and weigh, and it would be a distinct gain if it could be substituted for that now official.

*Syrup of Phosphate of Iron* is peculiarly liable to change, and in spite of many attempts no form has yet been devised yielding an unalterable preparation. In the official process sulphate of iron and phosphate of sodium react on each other, forming ferrous phosphate and sulphate of sodium, the resulting free sulphuric acid, which would keep a portion of the iron in solution, being nearly neutralized with bicarbonate of soda. After washing, the precipitate is dissolved in phosphoric acid, and this solution converted into syrup, which is therefore presumed to contain acid ferrous phosphate. But during the washing the original white precipitate has turned blue from the formation of ferrous-ferric phosphate, and this oxidation continues to some extent in the syrup, notwithstanding the protective action of the sugar, thus probably accounting for the change in color on exposure. Under such circumstances it would appear advantageous to direct a solution to be made directly from iron wire and phosphoric acid, in such proportions that, when mixed with simple syrup, one grain of phosphate should be contained in each fluid drachm. This is by no means a new idea, as it has been recommended by several very eminent pharmacists for a considerable length of time, and no doubt many chemists already manufacture their syrup thus; still it

would be better if authority were given for doing this.

*Tinctura Quinine Ammonata*, although so useful, is perhaps the nastiest medicine in the whole pharmacopoeia, combining as it does a sharp alkalinity with such intense bitterness. I wish to show you a specimen containing the full amount of quinine sulphate and solution of ammonia, partially disguised by the addition of glycerin and compound tincture of chloroform. I cannot claim that its admixture with water is any more elegant than that now official, but I think it would be much more readily taken by the fastidious. A fluid drachm forms only a slightly opalescent mixture with a wineglass of water. The suggested form is:

Quinine sulphate.....	grs. 160
Diluted alcohol.....	oz. 6
Comp. tinct. of chloroform.....	oz. 2½
Solution of ammonia.....	oz. 2½
Glycerin, to produce.....	oz. 20

Mix the quinine with the diluted alcohol, and add the tincture and ammonia, previously mixed together; shake and make up with glycerin to one pint. In this, as in the official form, there are nearly 8 minims of ammonia solution in each drachm. This appears somewhat large, and the mixture would be rendered much more palatable if the quantity were reduced to an ounce and a half.

*Effervescent Preparations.*—The proportions of the two acids in the effervescent preparations in the addendum require a little adjusting to secure strongly cohering granules. As now prepared, they are very apt to crumble to powder during the sifting, or even before such an advanced stage is reached. In effervescent sulphate of magnesia the citric acid should be increased to 6½ ounces, with a consequent reduction of ¼ oz. of the sugar. In effervescent phosphate of soda the amounts of the acids would be better if more nearly equalized, thus:

Powdered tartaric acid.....	12 ozs.
Powdered citric acid.....	10½ ozs.

*Mucilages and Injections.*—In the three mucilages, and one of the hypodermic injections, distilled water is employed, the exceptions being made with camphor water, and they are all more or less prone to change if kept any length of time, even protection from light being insufficient to obviate this. Perhaps it is impossible altogether to prevent decomposition, but a vehicle might be used, possessed of such preservative power that solutions made with it would keep unimpaired for a reasonable period. Water that has been boiled with the residue left after manufacturing syrup of tolu has one of the strongest claims in this respect, and could with advantage be employed in many pharmaceutical operations. Injections of ergotin and apomorphine hydrochlorate both keep well when made with it; while morphine injection not only does not turn brown so rapidly, but is less liable to deposit crystals of alkaloids. Mucilage of tragacanth already keeps fairly well, but the mucilages of starch and acacia are noted for their tendency to spoil. Specimens of these preparations with tolu water a month or more old, which have been kept at varying temperatures, are here, and I think they are all in a very fair state of preservation. There is perhaps one little drawback if mucilage of acacia is made with this water, and that is, the color is slightly deepened, but it is not too serious to prevent its adoption.

*Pills.*—In our present formulæ for pills it appears as if we are trying to combine two practically incompatible conditions, viz., a soft mass which will mix easily with other ingredients, and a pill mass of

sufficient consistence to roll, which when rolled and cut ought to yield pills that will keep their shape. Three masses alone answer these conditions; most of the others are much too soft when first made, and much too hard if kept for any length of time, and the ones that do not come under either category are of such consistence as to adapt themselves with singular exactitude to the shape of the containing vessel. Such pill masses as those of aloes and iron, or aloes and asafœtida if kept for a short time, become almost as hard as the mortar in which they were compounded, while others, as Plummer's pill, are just as unsatisfactory from never really hardening or drying at all. It would be a decided advantage, and a change that would be welcomed by most dispensers, if the official pills, with certain exceptions, were kept in powdered "species," say four grains to equal five grains of mass, the excipient being left to the discretion of the prescriber or dispenser. The exceptions of the pills of iron, iodide of iron, mercury, and phosphorus, none of which would lend themselves to such alteration if it were desirable I may perhaps be allowed to suggest the omission in the next edition of the synonym for pil. saponis co., for if one is to judge by recent correspondence that has appeared in our journals, considerable doubt may be engendered in the mind of the dispenser as to what is meant when pil opii is ordered in a prescription.

*Ointments.*—When unguentum cetacei is made without the benzoïn it will not keep for more than a week or two under ordinary circumstances. If benzoated it is not entirely satisfactory, for this reason that there are certain persons who cannot apply benzoic acid to the skin without its causing more or less irritation. This may be due to idiosyncrasy, but nevertheless it is the case, and only on the morning before I wrote this a case came under my notice in which much pain and smarting had been experienced after its application to the eyelids. Here it is proposed to make use of oil of theobroma. The following proportions yield an ointment almost indistinguishable from the official one, and probably much blander in operation, while the preservative properties of cacao butter are almost as marked as those attributed to benzoïn:

Spermaceti.....	4
White wax.....	8
Almond oil.....	18
Oil of theobroma.....	6

*Filtration Methods.*—Anyone who has had to manufacture simple elixir and such like preparations knows the difficulty there is in obtaining perfectly bright solutions of the essential oil in water. The use of calcium phosphate, as suggested by the U. S. Pharmacopoeia, partially gets over the difficulty, but if acid liquids are under operation an inert powder must be substituted. Recourse must then be had to kaolin, as directed by the B. P. C. Formulary. But a new difficulty arises from the extremely fine state of division in which kaolin exists; in suspension it can only be removed by filtering through a layer of itself and the constant turning back of the filtrate to secure this involves a great deal of time and trouble. To obviate these disadvantages I have to propose the use of a mixture of powdered paper, asbestos, and kaolin, in some such proportions as the following:

Paper powder (obtained by rubbing dried white filter paper through a 40-hole sieve).....	1 oz.
Asbestos (sifted).....	1 oz.
Kaolin.....	to 102.

Mix lightly together, finally sifting. The powder should be shaken up with the

turbid liquid for a few minutes and poured on to the previously wetted filter, the filtrate being returned until it passes through bright, which it does in a short time. Using this admixture, the filtering of such refractory liquids as acid glycerole of pepsin is rendered effectual and expeditious, while turbid solutions of essential oils in distilled water, etc., are very readily dealt with.

### Ancient Egyptian Pigments.\*

The red pigment used by the Egyptians from the earliest times is a native oxide of iron, a hæmatite. Most of the large pieces found by Mr. Petrie are an oölitic hæmatite. One specimen, on analysis, gave 79.11 per cent. and another 81.34 per cent. of ferric oxide. The pieces to be used as pigments were no doubt carefully selected, and the samples that I have examined, mostly from Gurob and Kahun, are very good in color. All the large pieces were of a singular shape, having one side smooth and curved; and in all cases this side was strongly grooved with striae, giving somewhat the appearance to the mass of its having been melted, and allowed to cool in a circular vessel. No doubt the explanation of this smooth-curved surface is that these pieces had actually been in part used to furnish pigments, and, having been rubbed with a little water in a large circular vessel, had been ground to this shape. By experiment it was found that these pieces of the native hæmatite yielded, without any further addition by way of medium, a paint which could readily be applied with a brush, as it possesses remarkable adhesive properties, and it resembles exactly, in every particular, the red used in the different kinds of Egyptian paintings.

In addition to these samples of the pigments, all of which are native minerals and in their natural conditions, there are other reds, finer in color and smoother in texture, evidently a superior pigment; these apparently have been made from carefully selected pieces of hæmatite, which have been ground and washed, and dried by exposure to the air. Some of these pieces are very fine in color, and it would be difficult to match them with any native oxide of iron that is used as a pigment at the present day. There is every reason to believe that this is the earliest red pigment which was used, and it remains to this day the commonest and most important one; it is a body unattacked by acids, unchangeable by heat, and even moisture and sunlight are unable to alter its color. At the present time many artificial products are used to take the place of this natural pigment.

**Yellow Pigments.**—These, again, are natural products, and by far the most common yellow used by the Egyptians is a native ochre. These ochers consist of about one-quarter of their weight of oxide of iron, from 7 to 10 per cent. of water, and the rest of their substance is clay. When moist they have a greasy feel, and work smoothly and well with the brush. There is no evidence of these bodies having changed color, but undoubtedly they are chemically not nearly so stable as the red form of oxide of iron. Many of the pieces of this pigment, found at Gurob and at Tel-el-Armarna, are very fine in color.

Some of the specimens of the very earliest colors of which the exact history is known appear to be an artificial mixture of these two colors, the red and yellow,

thus producing an orange color. These samples were found on a tomb at Medum, which, according to Prof. Flinders Petrie, was built by Nefermat, a high official and remarkable man at the court of Senefru. Senefru is known to have lived in the fourth dynasty, about 4,000 B.C., and to have preceded Khufu, the Cheops of the Greeks, who was the great pyramid builder. Now, on Nefermat's tomb the characters and figures are incised and filled in with colored pastes, which I have been able to examine, and it is of interest to know that this use of colors was a special device of Nefermat, for on his tomb is stated that: "He made this to his god in his unspoilable writing." In this unspoilable writing the figures are all carefully undercut, so that the colored pastes so long as they held together, should not be able to drop out. All the pastes used are dull in color, consisting entirely of natural minerals. Hæmatite, ochre, malachite, carbon, and plaster of Paris appear to be the materials used. Chessylite, as a blue, probably was known even at that date, but the artificial blues seem hardly at this period to have come into use; certainly they are not found in the specimens of the Nefermat colors which I have examined. Another yellow pigment, far brighter in color, was also often used. It is a sulphide of arsenic, orpiment; it is a bright and powerful yellow, again a body found in nature, but a much rarer body than ochre, and consequently, probably was only used for special purposes, when a brilliant yellow was required. As far as it is known at present, this pigment did not come into use until the eighteenth dynasty. Gold might even be placed among the yellow pigments, for it was largely used, and with wonderfully good effect. Its great tenacity seems to have been fully recognized, for gold is found in very thin sheets, and laid on a yellow ground, exactly as is done at the present day.

These pigments are then simply natural minerals, no doubt carefully selected, and sometimes ground and washed previous to being used; but the blue color which is so largely used by the Egyptians is an artificial pigment, and consequently has far more interest attached to it than those already mentioned. It is a body requiring considerable care and experience to make, and thus its manufacture enables us to some extent to judge of the knowledge and ability which its producers had of carrying on a chemical manufacture. No doubt the splendid blue of the mineral chessylite was first used, but certainly in the twelfth dynasty—that is, about 2,500 B.C.—these artificial blues were used. They are all an imperfect glass, a frit, made by heating together silica, lime, alkali, and copper ore.\*

The number of failures which may have occurred, and how much material may have been spoilt, cannot be known, but all the blue frit which I have examined—and it is a considerable amount, some being raw material, lumps as they came from the furnace, and the rest ground pigment—all has been, though differing in grain and quality, well and perfectly made. Now this implies that the materials have been carefully selected, prepared, and mixed, and that definite quantities of each were taken, this ne-

\* A sample of the pale-blue frit gave, on analysis, the following results:

Silica .....	88.65
S <sub>2</sub> O <sub>3</sub> .....	0.81
Copper oxide .....	2.90
Lime .....	7.88
Iron oxide, alumina, etc. ....	0.57
	100.00

cessitating the carefully measuring or weighing of each constituent. An early application of the fundamental law of chemistry, combination in definite proportion. The amount of copper ore added determined the color; with 2 to 5 per cent. they obtained a light and delicate blue; with 25 to 80 per cent. a dark and rather purple blue; with still more the product would be black; if the alkali was too little in amount, a non coherent sand resulted; if too much a hard, stony mass is formed, quite unsuitable for a pigment. The difficulties, however, did not by any means end with the mixture of the materials. For the next process, the heating, is a delicate operation. Unfortunately up to the present time the exact form of furnace in which this operation was carried on is not known. The furnaces were probably, especially after use, very fragile structures, and have passed away.

Considerable experience in imitating these frits even when using modern furnaces has taught me that the operation is really a very delicate one; the heat has to be carefully regulated and continued for a considerable length of time, a time varying with the nature of the frit being prepared; and, further, in the rough furnaces used it must have been specially difficult to have prevented unburnt gases from coming in contact with the material; but if they did, a blackening of the frit must have taken place. However, all these difficulties were avoided, and a frit was made which exactly answered all the necessary requirements. It had, for instance, the right degree of cohesion, for many of the large pieces which have been found have, like the hæmatite, a smooth, curved striated surface, and on rubbing in a curved vessel with water, easily grind to powder. The powder is naturally much less adhesive than the hæmatite powder, but on adding a little medium, it could at once be used, without other preparation, as a paint. Some of the pieces vary in color in different parts. This may have arisen from imperfect mixing, or from some parts of the furnace being hotter than others. It hardly appears to be intentional, possibly some of the dark, purplish-colored frits were produced by accident; large pieces of it have as yet, I believe, not been found.

By means of comparatively small alterations these frits could be obtained of a green color. One way was by introducing iron. If, for instance, the silica used was a reddish colored sand, it gave a greenish tinge to the frit; and frit made with some of the ordinary yellowish desert sand was found to give a frit undistinguishable from the most common of the old Egyptian frits. Again, a rather strong green color is obtained by stopping the heating process at an early stage, this green frit simply on heating for a longer time becoming blue. Another way in which even the strong colored blue frits have been converted into apparently green pigments is by their being coated over with a transparent but yellowish colored varnish which has to a remarkable extent retained its transparency, but no doubt become with age more yellow, and although strongly green now, may very likely originally have been nearly colorless, and consequently the frit was then seen in its original blue color.

Even as early as the twelfth dynasty the green frits used were dull in color, and if by chance a brighter green was required then they used the mineral malachite. No doubt by far the most brilliant blue used at any time was selected and powdered chessylite, and even down to the twenty-first dynasty they seem to have

\* A lecture delivered at the Royal Institution of Great Britain, by Dr. William J. Russell, F.R.S.

made use generally of somewhat colored frits; but after that time more subdued colors appear to have been used, and even the scarabs were made of a much duller color than formerly. All these blue frits form a perfectly unfadeable and unchangeable pigment. Neither the sun nor acids are able to destroy or alter their color.

The only other pigment to which I can refer this evening is the pink color, which, in different shades, was much used. This is again an artificial pigment, and belongs to an entirely different class from any of the foregoing ones, for it is one of vegetable origin.

On simply heating it fumes are given off and the color is destroyed, but a large white residue remains; this is sulphate of lime.

It may here be stated that the white pigments used sometimes were carbonate of lime, but more generally sulphate of lime in form of gypsum, alabaster, etc. This substance is often very white in color, is very slightly soluble in water, and has a singular smoothness of texture, which makes it work well under the brush; and in addition to these qualities it is a neutral and very stable compound, so is well fitted for the purpose to which it was applied. It was easily obtained, being found native in many parts of Egypt. It is also interesting to note that there is an efflorescence consisting of this substance which frequently occurs in Egypt, and is of a remarkably pure white color; probably this was used as a superior white pigment. It was easy to prove then that the pink color was gypsum stained with organic coloring matter, and to try and imitate the color appeared to be the most likely way of identifying it.

Naturally, madder, which it is known has from the earliest times been used as a dye, was the vegetable coloring substance first tried, and it answered perfectly, giving under very simple treatment the exact shade of color to the sulphate of lime which the Egyptian pigment had. Essentially the same coloring matter may have been obtained from another source, viz., Munjeet. In the case of madder it is interesting to note that the color is not manifest in the plant — the *Rubia tinctorum* — for it is obtained from the root, and is even not ready formed there. In the root it exists as a glucoside, and this has to be decomposed before the color becomes manifest. In this root there exist several coloring matters, which are known as madder-red, madder-purple, madder-orange and madder-yellow. On breaking up the roots and steeping them in water for some length of time the colors come out, some sooner than others, so that the tints vary. Again, changes of color are easily obtained by the addition of very small quantities of iron, lime, alumina, etc., so that in these different ways a considerable range of colors could be obtained, but a delicate pink color was the one probably generally made. This color is easily obtained by simply stirring up sulphate of lime in a tolerably strong solution of madder, and adding a little lime, taking care to keep the coloring matter in excess; the coloring matter adheres firmly to the lime salt, and this settles onto the bottom of the vessel; the liquid is then poured off and the solid matter, if necessary, dried, or mixed — probably with a little gum, and used at once without other preparation. That the coloring matter was really madder could also be tested by another method, viz., by means of spectrum analysis. Both the madder-red alazarin and the madder-purple purpurin give, when the light which they transmit is analyzed by the

prism, very characteristic absorption bands; the purpurin bands are the ones most easily seen, consequently it became a point of considerable interest to ascertain whether from a specimen of this pigment, some thousands of years old, these absorption bands could be obtained. A small sample of this pink pigment was taken from a cartonnage which was exhibited, and by treating it with a solution of alum the color was thus transferred to the liquid, and by throwing the absorption spectrum which it gave on the screen, and comparing it with the spectrum from a madder solution, it was clearly seen to be identical.

Many specimens in imitation of different colored frits, and a large copy of a cartonnage colored with pigments prepared by the lecturer, were exhibited.

### Ink Formulas.

In response to requests from several subscribers we reprint the following series of formulas for inks. The formulas have been declared by experts to be among the best ever published, having been devised by Eugen Deiterich, who incorporated them in his "Neues Pharmaceutisches Manual," edition of 1887. The later edition of this admirable work contains a number of new formulas which provide for the use of chemical salts not hitherto employed for the production of writing fluids.

#### 1. INK BODY A.

Macerate 200 parts of coarsely powdered Chinese galls for 24 hours with 750 parts of distilled water, strain and express. Upon the residue pour 850 parts of boiling distilled water and express after one hour. Triturate 5 parts of white bole with the mixed strained liquids, raise once to boiling, removing the scum, and then filter through flannel-bags. Wash the latter with water, until the total weight of the filtrate is 1,000 parts.

#### 2. INK-BODY B.

Three hundred parts of coarsely powdered Chinese galls, and 100 parts of fustic in coarse powder are extracted, as in the preceding case, with 750 parts of cold and 350 parts of boiling distilled water, the united strained liquids clarified with five parts of white bole, and the weight of the final filtrate made up to 1,000 parts.

In place of the extract of galls, tannin may be used; but in this case, as the other constituents of the extract are absent, it is necessary to add more of the salts, so as to increase the body of the ink. Inks made with tannin require more time to get black.

#### 3. SOLUTION OF INDIGOSULPHATE OF SODIUM.

Introduce 150 parts of fuming sulphuric acid into a flask placed in cold water, and gradually add, avoiding increase of temperature, 20 parts of powdered indigo, previously dried at 212° F. Cork the flask and set it aside for eight days at the ordinary indoor temperature. Meanwhile prepare a filtered solution of 205 parts of carbonate of sodium and 430 parts of distilled water; add this in small quantities, at the end of eight days, avoiding loss by effervescence; warm gently to remove retained carbonic acid, and finally add water to make the total weight 800 parts.

#### 4. SOLUTION OF CRUDE ACETATE OF IRON.

Macerate 10 parts of iron turnings with 100 parts of wood vinegar as long as any gas is given off; then digest two or three hours at a temperature not exceeding

122° F., filter, and adjust the filtrate to the sp. gr. 1.115.

#### ALIZARIN INK.

(Also Copying Ink.)

a. Dissolve 50 parts of green sulphate of iron in 750 parts of ink body B (cold), and then add the following ingredients in the order named: distilled water 100, solution of indigosulphate of sodium 150, solution of acetate of iron 25, chloride of ammonium 20, sulphate of sodium 20, sugar parts.

b. Mix tannin 50, green sulphate of iron 40, chloride of sodium 25, sugar 25, bisulphate of potassium 7.5, benzoic acid 2, dry indigocarmin 3, and picric acid 0.5 parts, with 1,000 parts of boiling water.

Either of these inks is decanted into a bottle which must be well stoppered. After a fortnight the clear ink may be drawn off from the sediment.

These inks will retain their copying quality for a period not exceeding twenty-four hours. Fresh writing furnishes brilliant copies.

#### BLUE NUTGALL OFFICE INK.

Ultramarine Ink.

a. Mix 500 parts of ink body A with a cold mixture prepared from: distilled water 300 parts, green sulphate of iron 30 parts, sugar 20 parts, hydrochloric acid 2 parts. Also dissolve, with a gentle heat, 2 parts of water-soluble aniline blue in 200 parts of distilled water, and add this when cold to the mixture first prepared.

b. Dissolve 40 parts of tannin, 30 of sulphate of iron, 32 of sugar and 2 of hydrochloric acid in 900 parts of distilled water, and add it to a solution of two parts of water-soluble aniline blue in 100 parts of dist. water prepared by heat and then cooled. Decant as in the preceding inks.

#### RED COPYING INK.

("Imperial Ink," "Isatin Ink," "Crown Ink," "Coral Ink," etc.)

Dissolve 50 parts of extract of logwood in a mortar in 750 parts of distilled water without the aid of heat; add two parts of chromate of potassium and set aside. After twenty-four hours add a solution of 3 p. of oxalic acid, 20 p. of oxalate of ammonium, and 40 p. of sulphate of aluminum, and 20 p. of distilled water, and again set aside for twenty-four hours. Now raise it at once to boiling in a bright copper kettle and add 50 p. of wood vinegar, and after cooling fill into bottles that must be corked. After a fortnight decant.

This ink is red in thin layers, writes red, gives excellent copies in brownish color, and turns blackish-brown upon the paper.

#### VIOLET COPYING INK.

(Hamatin Ink; Victoria Ink, etc.)

Dissolve 40 parts of extract of logwood, 5 of oxalic acid, and 30 of sulphate of aluminum, without heat, in 800 parts of distilled water and 10 parts of glycerin; let stand twenty-four hours. Now raise the mixture once to boiling in a bright copper boiler, mix with it while hot 50 parts of wood vinegar, and when cold put into bottles. After a fortnight decant it from the sediment.

In thin layers this ink is reddish violet; it writes dark violet, and furnishes bluish violet copies.

**Gonorrhoea.**—Ichthyol is now *de rigueur* in the treatment of this affection in Paris. The following is the formula:

Ichthyol..... 3 j  
Water..... 3 viij  
Three injections daily.

### Practical Training in Pharmacy.

The current number of the *Alumni Report*, the journal of the Alumni Association of the Philadelphia College of Pharmacy contains the following interesting contribution to the articles printed recently in these columns regarding the relative value of shop and college training :

Quite an interesting discussion has lately arisen in pharmaceutical circles as to the relative value of the practical training in pharmacy of the college laboratories, and that of the shops. On the one hand it is contended that the laboratory of a pharmaceutical college alone is the best place for practical instruction; on the other hand, it is claimed that while college laboratory work may greatly aid the student to a better knowledge of practice, it can never wholly replace shop experience in value. Now, which is right? Is it true that the time-honored practice of serving "an apprenticeship of at least four years, with a person or persons engaged in and qualified to conduct the drug business," has lost its original value, and that the hour has come when the laboratory instruction of the college shall wholly supersede shop training?

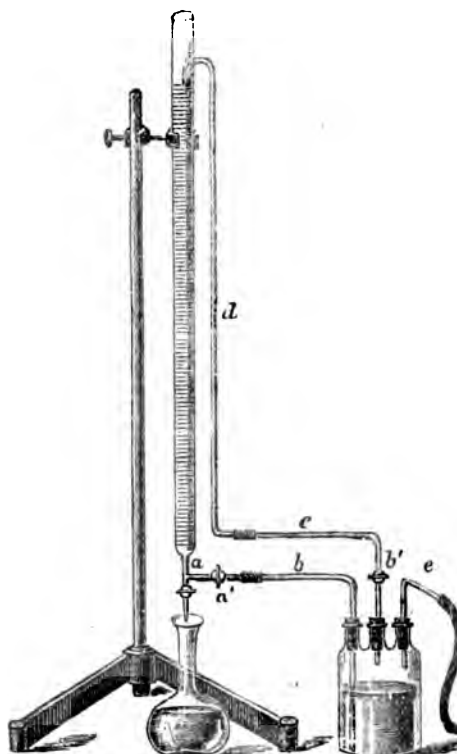
We doubt it. There is shop training, and there is *shop training*. In the one case you have a qualified pharmacist and a good teacher, and in the other an unqualified pharmacist and a poor teacher. Naturally, the value of an apprenticeship is dependent upon the ability of the preceptor to teach. In the older centers of population, where the proportion of pharmacists qualified and willing to teach apprentices is large, students find little difficulty in securing good preceptors; in the newer centers, where the proportion of pharmacists qualified and willing to teach is small, students must largely depend upon the practical instruction afforded by college laboratories. In such cases, it is evident, that the practical training of the college may be superior to that afforded by the local shops.

But this does not affect the fact, that where proper apprenticeship is easy of execution, it has certain advantages which render it worthy of the high esteem in which it has long been held. One of these is, daily practice in handling drugs and making preparations directly on the lines that the apprentice will follow in the future. The laboratory of a college may be a most efficient aid to theoretical instruction and all that one could reasonably ask—in fact, is indispensable—but there are a hundred and one details in the daily work of a pharmacist which the college cannot teach save only in a general way; and it is, in part, the gradual accretion of these many isolated facts, firmly impressed on the mind by daily work, that go to make up a well rounded and fully-trained pharmacist. Of themselves, they avail little; allied with college training in theory and practice, they are too valuable to be dispensed with.

Further, shop training begets a self-confidence in meeting emergencies that no college practice alone can possibly give; and self-confidence, based on proper knowledge, means not a little in the successful practice of pharmacy. There is another advantage, and that is, that the apprentice brought daily in contact with a practical work-a-day life, comes to look upon the duties of his profession from a practical standpoint, so that when he goes to college, he does not place an undue value upon theories, but seeks to differentiate between matters of purely theoretical value, and matters of practical value,

giving to each a proper place in his studies.

A short while ago, the editor of the *Report* addressed a letter to Dr. A. M. Davis, of this city (Philadelphia), a graduate of the Philadelphia College of Pharmacy, and in it asked: "Has your practical training in pharmacy been of any



AUTOMATIC ZERO ADJUSTMENT FOR BURETTES.

special service to you in medical practice?"

The answer was:

In response to query, I would say: Leaving aside all other considerations, such as the advantages had by a physician previously trained in pharmacy in prescribing, there is one feature of a drug store training that I consider of the highest value to a medical man, and that is, that such experience makes a man eminently practical in his thoughts and actions. My experience with medical students has been that the majority come from the higher schools of education to college brimful of theories, and with an absence of that practical knowledge of life which personal contact with the world alone can give.

They enter upon their studies with proper zeal, but they fail to differentiate between matters of theoretical value and matters of the most practical moment. Hence, when they graduate, they are illly prepared to cope with conditions in medical practice—and they are many—which demand for their solution practical methods. To my mind, the superior advantage of a preliminary training in practical pharmacy to a medical man admits of no argument; it is unquestioned.

In addition to this, we have received a letter from Dr. H. Bedell Crane, Ph.G., of Newark, N. J., in which he says: "I would not take hundreds of dollars for my experience in pharmacy as an aid to the successful practice of medicine." Now, if it be true that shop training in pharmacy is of such value to medical men, how much more must it be of value to students in pharmacy?

**Aluminum Borofomicate.**—Martinson stated at a recent meeting of the St. Petersburg Pharmaceutical Society that he had used this salt with the most satisfactory results as a succedaneum for the acetate, the aceto tartrate of aluminum, etc. It was found to act more surely and more mildly and also to be a disinfectant.

### New Apparatus Novelties, etc.

#### An Automatic Zero Adjustment for Burettes.

The burette is connected with a three-necked Woulff's bottle in such a manner as to have the tube *b*, connected with horizontal tube *a*, reach nearly to the bottom of the Woulff's bottle, and the overflow tube *d* connected with tube *c* reach only below the cork and a likewise short tube *e* connected with a rubber bulb. If stop cock *a'* is opened, while that of *b'* closed, and air forced into the Woulff's bottle by means of the rubber bulb, the liquid will rise in the burette, and when the latter is full stop-cock *a'* is closed and *b'* opened and kept in action till the liquid in burette has reached the zero point. When many determinations are to be performed this apparatus will save much time.—*Phar. Zeit.*

#### A New Chloroform Bottle.\*

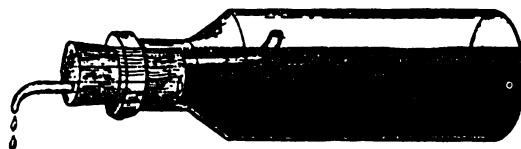
By F. OVERHOLT, M.D.

Some people are advocates of the "drop method" of giving chloroform. I mean by the "drop method," a continuous and regular precipitation of chloroform, a drop at a time, on to a thin cotton or linen mask, either rapidly or slowly, as the judgment of the anesthetizer thinks proper for the case in hand.

So far as I know, it is almost impossible to get chloroform from the so-called chloroform-droppers on the market, a drop at a time. Then earnest approach to a dropper that would drop that came to my notice, prior to the present invention, was an ordinary bottle, with a cork having two notches opposite to one another, and that is seldom a success.

With this dropper one can have the chloroform a drop at a time either rapidly or slowly, depending on the amount of inclination given the bottle. It is impossible to get it "squirty by squirt;" it must always come a drop at a time. The dropper consists of a three ounce bottle and a cork with two glass tubes in it, one a flow-tube, the other a vent-tube. The flow-tube begins at the inner end of the cork, passes through it, is then drawn to a point, and turned down to a right angle. The vent-tube begins at the outer end of the cork, passes through it, and is bent and of such a length as to nearly reach the inside surface of the bottle at the bulge.

Now, numerous people have used the idea of two tubes, one flow and one vent;



but, so far as I am aware, no one has packed the conical point of the flow-tube with cotton to regulate the flow. Herein lies the novelty and the success of this dropper, for by this means the chloroform can be made to flow to suit any purpose. I pack it so that with the chloroform just on a level with the flow, it will drop very slowly, say once every six to ten seconds; then, by tipping the bottle

\* From the *Medical Record*.



up, it will drop from sixty to one hundred and twenty a minute, which in my experience is as fast as is ever needed, provided the mask be thin and not covered with mucus or sputum.

The advantages are: 1, Anyone who can draw and bend glass tubing can make one in fifteen minutes; 2, it saves chloroform; and 3, it makes possible the giving of chloroform a drop at a time, the merits of which are not under discussion.

### A Simple Microtome \*

BY J. A. FORRET.

A microtome for all ordinary purposes may be constructed with the expenditure of a little time and trouble by any one possessing some knowledge of soldering, glass blowing, etc.

The instrument here figured in section is of the simplest description, yet is capable of producing good work. It is ready for use at a moment's notice, and does not readily get out of order. It is suitable for animal or vegetable tissues, and can be used with the material embedded in paraffin or frozen in mucilage.

The figure shows a cross section of the microtome as arranged for freezing. A and B are brass tubes. A being about three-quarters of an inch in diameter and B a little wider. The lower end of each is closed with as stout piece of brass, that at B being furnished with a screw (C). The upper end of A is notched as shown to allow free evaporation of ether and is surmounted by a piece of ruled copper or zinc. The tube B fits tightly into a piece of half-inch hard-wood (D) about 6 by 8 inches. Rigidity to B is secured by soldering round its upper end a metal collar (a stout piece of copper wire answers perfectly), and screwing down to D by screw nails, the heads of which impinge on the metal collar. Unless procured specially for the purpose, the tubes A and B will require some adjustment; the one must slide into the other tightly without oscillation. A simple means of accomplishing this is to use tubes, the one wider than the other by at least a quarter of an inch. On the outside of the narrow tube three brass or copper wires are soldered along the whole length of the tube, and at equal distances from each other. The best result is obtained by using wire a trifle thicker than is actually required, and reducing with a file when the wires are in position.

For cutting imbedded sections the narrower tube is replaced by one without the notches and ruled plate, but otherwise identical with A, and the paraffin block, carrying the specimen to be cut is fitted tightly into the open end of the tube.

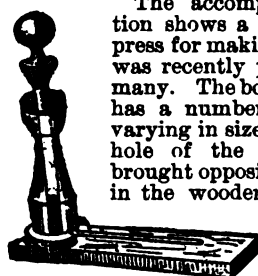
The spray-producer is made from ordinary glass tubing of fine caliber. F is connected by indiarubber tubing with a bottle containing ether, and a continuous bellows of indiarubber is attached to H. As a very small quantity of ether is sufficient the aperture of B is a mere pin-hole. This tube is easily manipulated by drawing it out in a flame, cutting at the narrowed part, fusing the end, and grinding off the point on a hone. The two tubes are adjusted so as to produce a fine spray, and are then permanently tied together with thin cord or fine copper wire.

A longitudinal slit is cut in A and B, through which the spray tubes are passed, the latter being kept in position by an indiarubber band attached to D. The ether bottle is conveniently suspended

from a small hook fixed to D. D is firmly screwed to a table or other suitable support of convenient height.

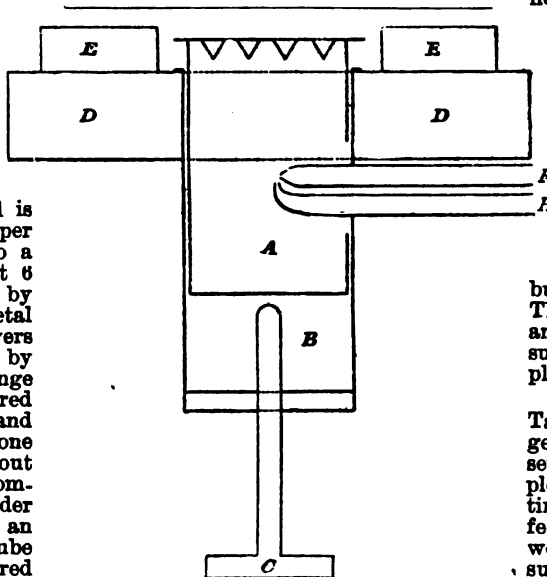
On the top of D, along each side of the well, is glued a narrow strip of plate-glass (E), about 3 inches long, to serve as a guide to the razor.

### Simple Bougie-press for Prescription Work.



The accompanying illustration shows a simple form of press for making bougies which was recently patented in Germany. The bottom of the tube has a number of holes in it varying in size. In practice the hole of the desired size is brought opposite the open space in the wooden base and when pressure is exerted the bougie is extended.

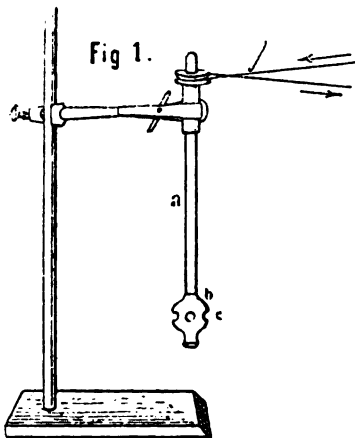
A mixture of 95 per cent. cacao butter with five per cent. of wax is recommended as a basis for use in this machine.



A SIMPLE MICROTOME.

### A Mechanical Stirrer.

O. N. Watt has devised a mechanical stirrer to be moved by a turbine, an illustration of which is shown herewith. The stirrer consists of a glass rod, a, which is



turned by a turbine. On the lower end of the rod is a glass birne, b, 20 to 25 mm. in diameter, which is open at the lower ex-

tremity and has four holes, c, on the side. In use this stirrer, which can make 5,000 revolutions per minute, draws up the fluid through the bottom opening and ejects it through the holes on the side. The mixing is thus done thoroughly without making any foam as when stirrers with wings are used.

### Medical Notes.

Lozenges to be used in congestion of the pharynx and larynx:

Chloride of ammonium, in powder.....700 gr.  
Tragacanth, in powder.....140  
Refined sugar, powder.....80  
Black current paste, as much as is sufficient.

Mix the ingredients, and add the paste until the whole mass weighs 1 pound. Divide into 350 lozenges of 20 grains each, and dry in a hot air chamber at a moderate heat. Each lozenge will contain about two grains of chloride of ammonium.

**Mercurial Ointment in the Treatment of Erysipelas.**—In the *Medical Reporter of Calcutta* Dr. A. S. Sandel says that he has recently employed mercurial ointment in a case of erysipelas with extensive sloughing of the integuments of the chest and abdomen, after free incision and the usual constitutional treatment had proved insufficient to arrest the progress of the disease. Its use in this case was attended with such decided advantage that he determined to give it another trial as soon as a favorable opportunity occurred. Within three weeks a similar case came under his observation. The patient was an Oorlah and rather aged, but he recovered under the treatment. The ointment was spread on fine linen, and with that the whole of the inflamed surface was kept covered. It was not applied on the open sores.

**Tannin as an Intestinal Antiseptic.**—Tannin is one of the most efficient of all germicides for use as an intestinal antiseptic. We have for several years employed this agent as an antiseptic in intestinal catarrh, and with most excellent effects. When administered by the mouth we have usually given 3-5 grains in capsule two or three times a day; but most useful results are also to be gained, especially in cases of pseudo membranous catarrh of the intestines, by first washing out the bowels with a large quantity of hot water, and then injecting a solution of tannin of the strength of one drachm to a pint.—*Dr. Braczekiewicz.*

**The Antiseptic Treatment of Burns.**—In the *Centralblatt für Chirurgie* for February 17 we find an abstract of a Paris thesis on this subject by Madame (or Mademoiselle) Nageotte. After a very interesting historical introduction concerning the methods formerly employed in the treatment of burns the authoress states that the best results possible are attained by maintaining on aseptic condition of the wound. She says that, especially in very painful burns, it is best to employ general anaesthesia, in order that the application of the antiseptic process may not be interfered with. After the wound has been rendered aseptic she endeavors, wherever it is possible, to procure its healing under a dry dressing whether the burn is of the first, the second, or the third degree, and uses as disinfectant agents iodoform, thiol, ichthyol, and particularly bismuth subnitrate as recommended by von Bardeleben. She adds histories of forty-five cases.

\*From the *British and Colonial Druggist*.



## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent*

**Phosphorous Rat Paste.**—L. W. S. writes: "Can you give me a satisfactory formula for phosphorous rat paste? That I have been making either ferments or dries up so much in a short time that the preparation rattles when the box is shaken."

We give a formula below which has been used with extremely gratifying results as affording a compound of relative cheapness and permanency when compared with the pastes of the market.

Starch.....	4 ounces
Flour.....	12 ounces
Glycerin.....	11 ounces
Water.....	q. s.
Phosphorous.....	1 ounce

Upon the unpulverized starch, placed in a convenient vessel, pour  $\frac{1}{2}$  pint of water, stir up the mixture and pass through a No. 60 sieve into a cast iron enameled kettle having the capacity of a gallon or more; add 12 ounces of water, then the flour and mix thoroughly, and apply heat by means of a sand bath until the plasma begins to form, stirring in the meanwhile constantly with a suitable pestle; then take the vessel from the fire and stir as before, while the plasma forms, so as to evenly divide it; after a few minutes reapply heat, stirring briskly until the plasma has completely formed, and then set it aside to cool, stirring it occasionally. Now place 1 ounce of phosphorous in stick into a glass-stoppered bottle (wide mouth) containing 12 ounces of glycerin, by weight, place the bottle into a water bath, apply a gentle heat, and shake often and quick, when the phosphorous will be completely divided through the liquid. Take a portion of the plasma, mix it gradually with four ounces of water, and add about one-fourth of the mixture of phosphorous and glycerin (shake well before adding) at a time, until the whole is thoroughly mixed, which should be done very quickly and in the open air, the operator being careful to tie a cloth around his mouth and nose, so as not to inhale too much of the fumes that arise. The result will be a fine smooth paste in which the phosphorous is evenly divided. It should be immediately bottled in small wide mouth bottles. Such as morphine bottles answer very well, of which pharmacists have always more or less on hand.

**Cream Camphor.**—We are in receipt of a communication from Asa Jones, M.D., Philadelphia, in which he states that the formula for cream camphor or milk of camphor, as given in our issue of March 8, does not furnish the genuine article. He further states that the term "cream camphor" is his "private property by authority of the United States government" and concludes his note with "please correct your statement." As Dr. Jones' right to the title "cream camphor" was not questioned or even referred to in the formula which gave occasion to this note we are at a loss to understand what has prompted Dr. Jones to seek a "correction."

**Solution of Bromide of Gold and Arsenic.**—We are in receipt of a letter from E. M. Johnson & Co., in which they call in question the value of the formula for solution of bromide of gold and arsenic which was published in this journal for January 25, page 43, from *Notes on New Remedies*. It is claimed that this formula is chemically inaccurate, not representing the equivalency of tribromide of arsenic either in respect to bromine or arsenic.

It is further stated that the widest difference exists between the preparation made after this formula and that of Dr. Barclay, which it is presumably supposed to duplicate.

With a view of ascertaining the chief points of difference, if any, between the two compounds (Dr. Barclay's Solution of Bromide of Gold and Arsenic and that made according to the formula referred to), we subjected each to a number of tests.

Dr. Barclay's Solution of Bromide of Gold and Arsenic, which we shall hereafter refer to as "Sample A," and the preparation as made by the *Notes on New Remedies* formula, which shall be referred to as "Sample B," were each tested roughly for hydrobromic and arsenic acids by ferrous sulphate. The addition of this reagent to Sample A almost decolorized the solution, but did not otherwise affect it, while Sample B acquired a milky hue, which changed rapidly to a dirty green color, with the formation of a dense precipitate of ferrous arseniate  $\text{Fe}_3(\text{AsO}_4)_2$ .

This preliminary experiment was convincing that Solution A differed in chemical constitution from Solution A.

In order to avoid the imputation of arriving too hastily at a conclusion, additional tests for the detection of arsenic acid were made as follows: After the precipitation of the gold in Solution B by metallic zinc and passing chlorine gas through the solution in excess; removing the liberated bromine by carbon disulphide (the latter together with free chlorine being afterwards expelled by heat) the solution was neutralized with aqua ammonia and the following tests were applied:

1. *Test solution of silver nitrate.*—This applied to the neutral solution (Solution B) yielded a white precipitate of chloride of silver which was thrown down immediately upon the application of the reagent; and lastly a dark brown precipitate of silver arseniate insoluble in aqua ammonia thus indicating the presence of arsenic acid.

2. *Test solution of plumbic acetate* yielded a white precipitate of lead arseniate insoluble in water.

3. *Test solution of ammonium molybdate.*—When gently warmed with this solution a yellow precipitate of arsenomolybdate of ammonium is thrown down.

4. On addition of aqua ammonia, ammonium chloride and magnesium sulphate to the solution there is yielded a crystalline precipitate of magnesium-ammonium arseniate,  $\text{MgNH}_4\text{AsO}_4 \cdot 6\text{H}_2\text{O}$ .

5. *Test solution of cupric sulphate.*—The grass green precipitate first formed upon the addition of this solution was dissolved in sodium hydrate solution and yielded a precipitate of cuprous oxide  $\text{Cu}_2\text{O}$ .

The foregoing tests were applied to Solution A with indifferent or altogether negative results, and we may therefore conclude that the two preparations are not identical in composition. The results of these experiments would indicate that E. M. Johnson & Co. have discovered some hitherto unknown method of com-

bining bromide of gold and arsenic in stable form.

**Mary Stewart Perfume.** C. O.—This is said to be closely imitated by the following formula:

Extract ambergris (1 dr. to 1 pt.).....	2 fl. ozs.
Extract vanilla (6 dr. to 1 pt.).....	4 fl. ozs.
Extract jessamine.....	6 fl. ozs.
Extract musk (1 dr. to 1 pt.).....	4 fl. ozs.
Extract orris (8 oz. to 1 pt.).....	8 fl. ozs.
Extract rose.....	1 pint
Oil bergamot.....	2 fl. ozs.
Deodorized alcohol.....	4 pints.

Mix and macerate two weeks before filtering.

**Seiler's Solution.** F. P.—A printer's oversight is responsible for the error referred to. The sign  $\text{Ji}$  should read Oil.

**Bottle Filler Wanted.**—C. H. M. writes: "Please give the address of some one who manufactures a bottle filler in the shape of a percolator with a small opening at the bottom and a tube just large enough to fill the opening, with a spring on top to raise the tube to let the liquid pass out."

Perhaps some of our readers can supply this information.

## Bibliography.

A SYSTEM OF INSTRUCTION IN QUALITATIVE CHEMICAL ANALYSIS. By Arthur H. Elliott, Ph.D., Professor of Chemistry and Physics, and Director of the Chemical Laboratory in the College of Pharmacy of the City of New York. Second edition, 1894. Published by the author, College of Pharmacy of the City of New York, \$1.50.

The fact that the author has found it necessary to issue a second edition of this excellent manual so soon after the publication of the first affords an indication of the warmth of the welcome which the book has received at the hands of those for whom it was intended. Already it has been adopted as a text book for practical instruction in six teaching institutions and the work bids fair to take chief place among the indispensable manuals of its class. In our earlier review of the work we commented on the rather slow and tedious method which the author had given for the separation of barium from strontium and calcium. In the new edition we find an alternative method given which will commend itself to teachers and others as eminently practical and convenient.

As a text book for the chemistry classes of colleges of pharmacy the work is sure to find increasing favor. The book is clearly printed on good paper and excellent taste has been displayed in the binding.

THE LATIN GRAMMAR OF PHARMACY for the use of medical and pharmaceutical students. With an essay on the reading of Latin prescriptions, and reference vocabulary (enlarged). By Joseph Ince, F.C.S., F.L.S., F.G.S., Associate of Kings' College, London; lecturer in pharmacy to the Pharmaceutical Society of Great Britain, etc. Sixth edition. London: Baillière, Tindall, & Cox, 20 King William street, Strand, 1894.

In England and Scotland, where Latin forms an important subject of both the Preliminary and Minor examinations of the Pharmaceutical Society of Great Britain, Ince's widely known compendium enjoys a well deserved popularity. In point of practical usefulness as determined by the space given to Latin prescriptions and medical formulas it is not approached by any work of a similar kind. It is a work which we think might be included with advantage among the text books of American colleges of pharmacy as it contains just the explanations of the grammatical construction and descriptive character of the Latin language which students of pharmacy need most. The vo-

cabulary of the technical phrases with which the volume closes is remarkably full and will in itself prove of great value to students. We are enabled to present this notice of the work through the courtesy of the author, who, however, needs no introduction to American pharmacists, as his reputation as a teacher and author is widespread and not confined to Great Britain alone.

**A CLASS COMPEND OF PHARMACEUTIC BOTANY**, embracing an elementary treatise on the structural, morphologic, microscopic, physiologic and systematic department of botany, designed especially for students of pharmacy and pharmacists. By David M. R. Culbreth, Ph.G., M.D., Professor of Botany, Materia Medica and Microscopy in the Maryland College of Pharmacy, with a synopsis of the natural order that include the vegetable drugs of the U. S. Pharmacopoeia, 1890. Illustrated. Baltimore, 1893. Published by the author.

The author both by education and experience is well fitted for the task which he has undertaken, and in the practical nature of the work and in its general scope the influence of his experience as a pharmacist is visible.

There is no doubt but that the volume will be of much value in aiding the pharmaceutical student to master a somewhat neglected portion of the curriculum.

**THE PHYSICIAN'S WIFE; AND THE THINGS THAT PERTAIN TO HER LIFE.** By Ellen M. Firebaugh. With portrait of author and 44 photo-engravings of original sketches. In one crown octavo volume of 300 pages. Extra cloth, \$1.25 net. Special limited edition, first 500 copies numbered, and printed in photo-gravure ink on extra fine enameled paper; bound in half leather and velum cloth, \$3 net. Philadelphia: The F. A. Davis Co., publishers, 1914 and 1916 Cherry street.

This work is evidently intended as a companion volume to Cathell's "Book on the Physician Himself." The authoress, who writes in a pleasing and chatty strain, acknowledges having perused the latter with "great gusto," and we are given to understand that she conceived the idea of enlarging a pamphlet to the dignity of a book from the example of the writer named. She has made diligent search among the works of the ancient medical writers for references to the physician's wife," but from what we can gather has been most unsuccessful in her quest. The work will perhaps find favor with the wives of country doctors, to which, the authoress tells us, it relates especially, but it can in no sense be compared to the admirable work of Cathell, which has now reached a tenth edition, and is published from the same office.

**THE MODERN CLIMATIC TREATMENT OF INVALIDS WITH PULMONARY CONSUMPTION IN SOUTHERN CALIFORNIA.** By P. C. Remondino, M.D., Member of the American Medical Association; American Public Health Association; ex-Vice-President California State Medical Society; Member of the State Board of Health of California; and President of the Board of Health of the City of San Diego, etc., etc. 1920, paper, pp. 150; price 25 cents. [Physician's Leisure Library Series.] Geo. S. Davis, Publisher, Detroit, Mich. 1898.

Dr. Remondino is a charming writer and an authority of some repute on climatology; he has given the subject much thought, and his little work will repay a perusal by every one interested in the climatic treatment of tuberculosis of the lungs.

**QUININE HISTORICALLY.**—A paper read at the twelfth annual meeting of the Virginia Pharmaceutical Association, September 14, 1893, by Robert Brydon, Danville, Va. Reprinted from the proceedings of the Virginia Pharmaceutical Association.

This pamphlet contains 26 pages of interesting statistical and historical information pertaining to cinchona and the cinchona alkaloids with especial reference to quinine. Its compilation must have entailed unusual labor and necessitated considerable research, and the author will

receive the thanks of all interested for presenting in convenient form for reference so much information of value on so important a drug.

**MINERAL RESOURCES OF THE UNITED STATES**, calendar year 1892, by David T. Day, Chief of Division of Mining Statistics and Technology. Washington: Government Printing Office, 1893.

This is the ninth volume of the series of reports issued under the same title begun in 1882. It contains much matter of interest and of great commercial importance. Among the most interesting of the papers contained in the volume is the report of George F. Kunz on precious stones.

**Seventh Annual Report of the Nebraska State Board of Examiners of the State Board of Pharmacy with abstract of State Pharmacy Register and Pharmacy Law, 1893.** M. E. Schultz, secretary, Beatrice, Neb.

This contains a list of the registered pharmacists of the State and some interesting decisions of the Attorney-General on the Nebraska Pharmacy Law.

## Books, etc. Received.

**THE WILSON Tariff Bill** as presented to the House of Representatives together with an alphabetical list showing proposed new duty. New York and Philadelphia: F. B. Vandergrift & Co.

**PROCEEDINGS OF THE TWELFTH ANNUAL MEETING OF THE NEBRASKA STATE PHARMACEUTICAL ASSOCIATION**, held at Nebraska City, Nebraska, June 6-8, 1893.

**UNIVERSITY OF MINNESOTA.** Special Announcement of the College of Pharmacy of the Department of Medicine.

**PROSPECTUS OF THE ST. LOUIS COLLEGE OF PHARMACY**, Twenty-eighth Annual Session.

**PROCEEDINGS OF THE MICHIGAN STATE PHARMACEUTICAL ASSOCIATION**, held at St. Clair Flats, June 19-22, 1893.

**PROCEEDINGS OF THE MINNESOTA STATE PHARMACEUTICAL ASSOCIATION**, at the ninth annual meeting held at Hotel St. Louis, Lake Minnetonka, June 13 and 14, 1893.

**A CRITICAL REVIEW OF THE SEVENTH DECENNIAL REVISION OF THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA.** By George M. Berlinger, A.M., Ph.G. Reprinted from the *American Journal of Pharmacy*. Pp. 47.

**LECTURES ON AUTO-INTOXICATION IN DISEASE, OR SELF-POISONING OF THE INDIVIDUAL.** By Ch. Bouchard, Professor of Pathology and Therapeutics, etc., Paris. Translated, with a Preface by Thomas Oliver, M.A., M.D., F.R.C.P., Professor of Physiology, University of Durham, etc. Philadelphia: F. A. Davis & Co., 1894. Pp. xvi, 302. [Price, \$1.75.]

**CATALOGUE DES PIÈCES D'ANATOMIE humaine.** d'anatomie comparée et d'anatomie botanique. Mars, 1894. Maison Emile Deyrolle Les Fils D'Emile Deyrolle, Naturalistes, Successeurs, Paris, 46, Rue du Bac (Téléphone).

**IMPORTANCE TO THE SURGEON OF A BACTERIOLOGICAL TRAINING.** By Hunter Robb, M.D., Associate in Gynecology (Abstract of an article read before the Clinical Society of Baltimore, December 1, 1893). Reprint from the Johns Hopkins Hospital Bulletin, No. 36, December, 1893.

**MAINTENANCE OF AN ASEPTIC TECHNIQUE IN GYNCOLOGICAL OPERATIONS OUTSIDE OF HOSPITALS.** By Hunter Robb, M.D., Associate in Gynecology. Read before the Medico-Chirurgical Faculty of Maryland at Annapolis, November 22, 1893. Reprint from the Johns Hopkins Hospital Bulletin, No. 35, November, 1893.

**A NEW SPICOT ATTACHMENT TO FACILITATE ASPSIS.** By Hunter Robb, M.D., of Baltimore, Associate in Gynecology, Johns Hopkins University. Reprint from the Annals of Surgery, February, 1894.

**THE IMPORTANCE OF EMPLOYING ANESTHESIA IN THE DIAGNOSIS OF INTRA-PELVIC GYNCOLOGICAL CONDITIONS.** Demonstrated by an analysis of 240 cases. By Hunter Robb, M.D., Associate in Gynecology, Johns Hopkins University. Reprint from the Johns Hopkins Hospital Reports, Vol. III, Nos. 7, 8, 9, Baltimore, Md.

**TWENTY-SIXTH ANNUAL REPORT OF THE NEW YORK ORTHOPÆDIC DISPENSARY AND HOSPITAL**, 126 and 128 East 59th street, 1894.

**SHALL THE PRACTICE OF MEDICINE AND THE PRACTICE OF PHARMACY CONTINUE DISTINCT AND SEPARATE?** Read in the Section on materia medica and pharmacy, at the Forty-fourth Annual Meeting of the American Pharmaceutical Association. By J. M. Good, Ph.G., St. Louis, Mo.—Reprinted from The Journal of the American Medical Association, January 6, 1894.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place, New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

Give the definitions of the following terms in your own language:

1. Physics.
2. Chemistry.
3. Botany.
4. Pharmacognosy.
5. Pharmacology.
6. Pharmacy.
7. Materia medica.
8. Therapeutics.
9. Posology.
10. Metrology.
11. What is physical incompatibility; give an example?

12. From what is glycerin made; what is its formula, and what impurities are generally present?

13. When ammonium carbonate is added to syrup of squills what reaction occurs?

14. What is the difference between Donovan's solution, Fowler's solution and Clemens' solution?

15. What is creasote obtained from; how may it be distinguished from carbolic acid?

**Mineral Acids in Vinegar.**—The *Chemiker Zeitung* recommends the following test. A cubic centimeter of the vinegar is placed in a capsule and one drop of an alcoholic solution of rosaniline hydrochloride (25 gr. fuchsin in 100 Cc. 90 per cent. alcohol) added. If the vinegar is pure the liquid will retain a reddish violet color; if mineral acids are present, even to the extent of one per cent., the liquid becomes dirty yellow. The characteristic color of fuchsin is again restored after neutralizing with alkali.

**Phenocol.**—The melting point of the purified base in the hydrated condition is stated by Dr. Francesco Nicola to be 113° instead of 95°, as usually given, and the anhydrous base melts at 99°.5. When phenocol is heated somewhat above its melting point, ammonia is given off, and the residue dissolved in water gives a fine red violet color when a few drops of ferric chloride solution are added. The hydrochloride, which has hitherto been described as anhydrous, crystallizes with one molecule of water. Nicola confirms Fischer's statement that phenocol dissolved in 20 parts of water at 15°.5 to 16°. The salt melts with partial decomposition at 254°, beginning to cake together at 200°, and becoming slightly brown at 280°. The residue after melting, dissolved in water, and mixed with a drop of ferric chloride solution, gives an intense reddish violet color, which is considered by Nicola to be a useful means of identification (*Annali di Chimica e di Farmacologia*).

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record.*

### How to Advertise.

By B. O. KYSETH,

Of Kyseth & Tolleson, Lansing, Mich.

This is a question which is of greater importance to the druggists than a great many seem to think it is. Some



### CUT ALL TO PIECES.

That's what's the matter with prices at our store. Times are hard, we want to keep busy, therefore we will clear out all our fancy goods stock at—well, we don't want to sell them at a loss, but some of them will have to go at less than cost.

We don't keep old goods—we sell them before they get old. We don't keep old drugs. If we can't sell them fresh we burn them up or throw them away.

That's why our store is popular. Fresh goods, fresh drugs, all of the best quality.

Z. Taylor Clark.

BAYONNE, N. J.

say, advertise through the local papers, while others seem to think that show bills, dodgers, etc., are the best.

When we pick up our newspapers we find sometimes whole pages devoted to some clothing or dry goods firms' advertisement, or to that of some patent medicine house, lauding their sarsaparilla or nervine, but we fail to find any retail druggist's advertisement, or if there is any it is in some out of the way place, or in such a shape that it would not attract attention. Without doubt, the best way to reach the public at large is through newspaper advertising. Newspapers are to be found in nearly every house in this country and when we advertise in them our advertisement is spread far and wide throughout the land.

The large dry goods firms claim that it pays to use printers' ink;

why should it not pay for the retail druggists as well, if it's used in the right way. I believe the greatest trouble with many of us druggists has been that we did not know how or else did not try to advertise our business to advantage and in a profitable way, and have therefore thought that what we paid out for advertising was just so much money thrown away.

I thought that way myself until I found that I was entirely mistaken. I find (especially among the country druggists) in many places, that when they have an advertisement in the local paper, which will read something like this: "John Jones & Co., dealers in drugs, medicines, paints, oils, brushes, stationery, wallpaper, druggists' sundries, perfumes, putty, glass, etc.," and then it's left in that shape until John Jones & Co. retire from business, or fail. Now, I believe that kind of advertising is just about that much money wasted. The people will probably read it once, and that is all. They get tired of looking at it.

I have been reading the "tips on advertising" in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and can say for myself, that it has been the most profitable knowledge that I have ever gained from any drug journal.

When I found the way that other druggists advertised their business, I began to think that I did not know anything about how to advertise, but I at once began to give that part of my business more attention. We pay a certain amount for a space in our local paper, and have the privilege of changing it every week if we wish to do so. I don't believe in running an "ad" in the paper more than once or twice without changing it, and I always put it in such a shape that the readers' attention will be called to it at a glance. I put in some attractive head line and after his attention is called to it the reader will, in most instances, read the whole advertisement, if it is gotten up in a business like form.

We don't try to advertise everything we keep in the store at once, but take one line at a time, and advertise it only in its season. When it is the season for cough medicines we advertise them, and when it is the season for cholera remedies we give them a push. We have a specialty in the cough syrup line (Dr. Moore's Arabian honey) which we always make a point to bring into our "ad" during the cough syrup season, and we have found that it pays to do so, as we have sold more of this cough syrup alone than of all the other cough medicines we handle put together, and I can't see any other reason for it than because we have advertised it and pushed it in its season.

I believe in druggists putting up a few

of their own specialties to push at the different seasons of the year.

In the prescription department the greatest advertisement we can make is the neatness and accuracy of our work, and which gain the confidence of the people. I would never cut on the prices of prescriptions, because if I did the people and the doctors would then think that I was using poor and inferior drugs in the compounding of prescriptions, and in place of gaining trade I would lose it.

I always impress upon the minds of our customers that the best of drugs are none too good for our prescription case; that this is the only kind of goods we use; that we positively will not use an inferior



### SEE THE RUSH.

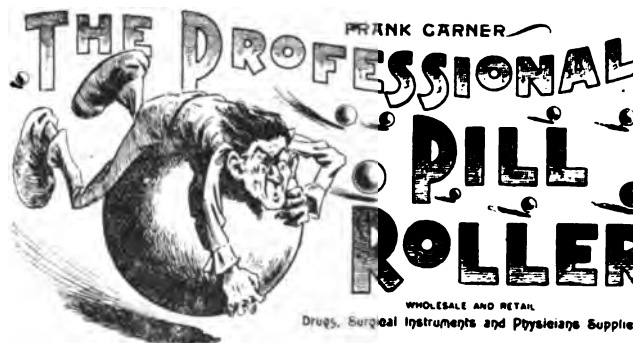
It's my soda water. They always come in crowds because it's the best in town. Just like my drugs, they're the best that can be had.

There are two things you want good, your soda water and your drugs. I have them, all ready for you, but come early and avoid the rush.

RUSH HOURS 9 to 11 A. M.  
8 to 9 P. M.

C. W. KNAPE,

CARLSTADT, N. J.



WHOLESALE AND RETAIL  
Drugs, Surgical Instruments and Physicians Supplies

Sumaville, Tex.

A TEXAS IDEA.—From Printers' Ink.

quality of drugs, and that the price of a drug does not cut any figure with us when we buy our goods. It will sometimes do in other lines of business to handle cheaper grades of goods, but when a customer brings in a prescription to be filled he always wants the best of medicines that can be had, regardless of price. Prescriptions are something that the people at large don't know anything about, and when they go to a drug store to get it compounded they leave it entirely to the druggist's honesty and skill, and for that reason it is necessary that we gain the people's confidence.

It is sometimes a good idea to give a brief history of the medical properties, doses, etc., of one of our most commonly used drugs, also its different preparations with their doses, etc., and

then tell them it can be had at our store and that we guarantee absolute purity.

From an advertisement of this kind the people will gain the idea that you are well posted upon medicines, and as they read it for what knowledge they can gain from it they will look for your next "ad."

I do not take much stock in circulars, but sometimes the right kind of a "dodger" may do some good. We have one of which we have a supply laying on our counter (where we can reach it without much effort) which we inclose in every package that goes out of our store, and I believe it has done considerable good; besides they are a cheap way of advertising.

And after all this is done through the printer's ink I believe in keeping your store neat and clean, handle pure and reliable goods, be honest and truthful, wait upon the poor as politely as the rich, greet your customers with a pleasant look, and always attend to your own business.

"Well bought is half sold." Read the "trade notes" and market review every week.

We mentioned not long since a very simple form of bookkeeping as practiced by a New York pharmacist. This consisted in keeping a series of slips on one of which each customer's account was kept. These slips were arranged alphabetically and were destroyed as the accounts were paid. One of the readers writes us of a somewhat similar method pursued by a busy Brooklyn pharmacist. This gentleman has a slip of paper on his desk at the head of which the day of the month is written. All charges are entered on this slip as they would be in a blotter. At night these entries are copied on strips of paper, there being a separate strip for each customer's account. These strips are then placed on ordinary wire bill files of which there are a sufficient number to allow of an alphabetical arrangement. When a bill is paid the slip is receipted and turned over to the customer.

Read the "trade notes" and the market review every week if you want to keep posted.

The following is a rather unusual "reader" run by a Bridgeport, Conn., druggist in his local paper:

The necessity of having a prescription compounded by a thoroughly competent person is being realized more and more every day. It might be a question of "life and death" when the prescription is in the hands of the druggist. Cyrus, the druggist, Fairfield avenue, foot of Courtland hill, has received diplomas of examination from Sweden, 1835, Massachusetts, 1838, New York, 1839, and Connecticut, 1839.

There are scores of business men who when told that the circulation of a trade paper is 3,000 to 4,000 are inclined to ridicule its claim as an advertising medium, not knowing that a single edition of a trade paper, having a circulation of 1,000 copies reaches more persons whom they wish to reach than the issue of a daily paper of 100,000 copies. Those who may be surprised at this statement and imagine that the figures are incorrect may easily convince themselves of their error by referring to the commercial agency reports. To reach the consumer of general merchandise the daily papers are a valuable medium; to reach those particularly interested in trade, the trade papers alone cover the field.—*Journal of Building.*

"Well bought is half sold." Read the "trade notes" and market review every week.

### The Apothecaries' Guild of Boston and Vicinity.

The foundation for this Guild was laid at the meeting of the Massachusetts Pharmaceutical Association, held at Springfield in 1892, when, after a discussion of the pros and cons of local organization \$200 was appropriated for the purpose of forming local organizations throughout the state. The matter was intrusted to the charge of an efficient committee composed of Henry Canning, chairman, and William C. Durkee, Geo. W. Cobb, Fred. L. Carter, and W. F. Sawyer.

As a result of the deliberations of this committee it was decided to inaugurate the movement in Boston and this was accomplished by securing the services of a paid agent to canvass the trade. The results proved this step a wise one, for in nearly every instance the druggists called upon and found in signed the petition for



N. W. STYLES.  
President of the Apothecaries' Guild of Boston and Vicinity.

a meeting for the purpose of organization. By this method over 200 signatures were secured, and then Mr. Canning issued a vigorous call, and the Guild became a certainty on January 30, 1893. The officers elected at that time were: N. W. Styles, president; C. P. Flynn, vice-president; C. A. Bartlett, secretary, and Geo. W. Cobb, treasurer. Executive committee, S. A. D. Sheppard, W. C. Durkee, C. A. Charles, C. A. Miller, A. L. Wyman, H. S. Garcelon, G. W. Flynn, C. A. Brown and J. W. O'Mealy. Subsequently Secretary Bartlett resigned and F. W. Reeves of Cambridge was appointed to that arduous position.

With this single exception the officers above mentioned were re-elected at the annual meeting of January last.

Here is the preamble, constitution and by-laws which were adopted and under which the body has since acted.

#### PREAMBLE.

The members of this association declare its object to be the advancement of the mutual interests of its members.

#### CONSTITUTION.

##### ARTICLE I.

SECTION 1. This association shall be known as "Apothecaries Guild" of Boston and vicinity.

SEC. 2. The officers of this association shall consist of a president, vice-president, secretary, treasurer, and ten directors, who shall constitute an executive committee.

SEC. 3. The secretary and treasurer shall make a report at each regular meeting.

SEC. 4. Any retail druggist recommended by the executive committee may become a member of this association by the payment of \$2 and signing the constitution and by-laws.

SEC. 5. Any amendment of the constitution or by-laws shall be put in writing and remain on the table until the next regular meeting; a vote of two-thirds of the members present shall be necessary for its adoption.

##### BY-LAWS.

##### ARTICLE I.

SECTION 1. The regular meetings of this association shall be held on the first Thursday of each month at 2.30 P.M. Special meetings may be called by the president and secretary, and shall be called on the written request of ten members.

SEC. 2. Ten members shall constitute a quorum.

SEC. 3. All questions of parliamentary law shall be decided according to Cushing's Manual.

##### ARTICLE II.

SECTION 1. The regular meeting in January shall constitute the annual meeting for the election of officers.

SEC. 2. The officers of this association shall be elected by ballot. At the regular meeting in December a nominating committee composed of five members shall be chosen by the house, they to report at the annual meeting in January.

Volunteer canvassers immediately came forward, and they were divided into districts, and in this way many more signatures were secured, until now the Guild has the magnificent membership of 331. Its membership, as its name suggests, is not confined to Boston, and druggists from Cambridge, Somerville and Malden are included in its ranks. Money is a prime necessity in organization of this character, and the rule has held good in the present instance. A dollar of every two received has been forwarded to the officials of the Interstate League for membership in that body, and the affairs of the home organization have, of course, entailed an expenditure of cash.

As soon as the Guild assumed definite shape druggists in other sections of Massachusetts and other States became interested in the movement, and as a result of many inquiries Mr. Canning and the officers of the Boston organization soon found themselves in receipt of a voluminous correspondence. Messrs. Canning, Cobb and others were also importuned to visit different cities to further local organization. This has been done as far as practicable, but at great personal sacrifice to the Boston men, and as a result we find flourishing organizations in Lowell, Worcester County, Springfield and Rhode Island, and in consequence of seed previously sown other eastern cities are ripe for harvesting.

Secretary Reeves has just finished an important canvass, during which he visited about twenty towns in the vicinity of Boston and called upon 440 retail druggists; of this number only 15 refused to subscribe to the League plan which was adopted at the New York meeting.

C. A. Charles of Malden has just organized Brockton, and the signers from the latter city have forwarded their membership money to the League officers. Mr. Charles has also visited Salem and Lynn in the interests of the League. President Styles of the Guild, William C. Durkee and many others have done yeoman service in the interest of organization. These gentlemen have all generously contributed their time and money to this praiseworthy effort. In Secretary Reeves' case, for example, a great amount of labor was involved in his canvass, and how well he accomplished his purpose is shown by the



result. That the Guild disbelieves in shading its light under the proverbial bushel is seen in its action in sending Mr. Canning to Chicago to attend the Interstate League meeting. It has also sent delegates to New York to organize that city, and it was represented by three delegates at the Feb. 6 meeting held in this city. Messrs. Canning and Cobb stopped at New Haven, on their returning from New York, to attend the meeting of the Connecticut Pharmaceutical Association, and as a result of their efforts, that association voted the sum of \$200 for the purpose of organizing that State.

In Rhode Island there is but one organization, the "Mortar and Pestle Club," and its formation was partly due to an ingenious scheme which at present is being elaborated upon in other sections. It was accomplished by invoking the aid of the drummer, who, if anyone, is always in touch with the retailers, and Irving W. Smith, representing George L. Clafin & Co. of Providence, was the man who did this work most creditably.

President Canning recognizes the influence of the drummer and is endeavoring to perfect arrangements whereby the trade may be largely organized with this basis. What Mr. Smith accomplished in Rhode Island, other traveling men can bring about in other States, and, as our New England wholesalers are heartily supporting this idea, it seems to be an assured certainty in this section.

In pursuance of this plan, President Canning of the Interstate League has had a large number of blanks for obtaining signatures prepared which he proposes to send to every State in the Union; they are not for the exclusive use of drummers, however. The first is a petition for a local organization the is as follows:

We, the undersigned apothecaries, favor the formation of an association of retail apothecaries, for this city or county, to form a branch of the Interstate Retail Druggists' League, and will do what we can to make it a success.

The following blank is to be signed with the above, and forwarded to President Canning:

We, the undersigned apothecaries, believing the League plan is a practical method for the maintenance of fair and legitimate prices, hereby petition the makers of proprietary goods to adopt that method of selling their preparations, and we agree not to sell directly or indirectly, products, the makers of which agree to adopt the League plan, at less than the prices recommended by the "Apothecaries' Association" of this vicinity.

In brief, the League plan requests proprietors to sell their goods to the jobbing drug trade only, requiring the jobbers to sell to retailers at uniform prices, regardless of quantity.

This agreement to take effect when 80 per cent. of the retail apothecaries of this vicinity have signed this agreement, and adopted a schedule of prices.

#### EXTRACT FROM DETAILS OF LEAGUE PLAN.

We, manufacturers, desire to have retail dealers fully protected in obtaining the regular prices, and all selling agents will refuse to supply all recognized and voluntary cutters of prices of any proprietary articles, whether wholesale or retail dealers.

Furthermore, whenever the retail trade of any city, town or county, have organized a league or Association, embracing 80 per cent. of such dealers located in such city, town or county, and have established a schedule at which proprietary articles shall be sold by its members, and such facts shall be reported to you, either by such organization or by the undersigned, then you shall not supply our goods to any dealer in such city, town or county, who sells proprietary articles in violation of such schedule so established, except at full retail prices.

Before closing, mention should be made of the self-sacrificing work which is being given to this movement by our eastern men. Some of the principal workers, both in the League and in the Guild, would be least benefited by the success of this effort, as the personal business of those alluded to is confined, more particularly, to other lines than the handling of patents.

"Well bought is half sold." Read the "trade notes" and market review every week

## Boston.

A meeting of retailers interested in the formation of the "New England Retail Druggists' Union" was held in Garfield Hall, Boston, on the afternoon of March 16. The meeting was called to consider the report of the committee on nomination of officers and by-laws. J. Allen Rice, president M. P. A., was elected temporary chairman, and then the following officers were elected in accordance with the committee's report: President, Geo. W. Cobb of East Boston; vice-presidents, Charles H. Hyde, Rutland, Vt.; A. S. Wetherell, Exeter, N. H.; James O'Hare, Providence, R. I.; James Duggan, Norwich, Conn.; D. W. Hazeltine, Portland, Me., and Wm. C. Durkee, Boston, Mass.; secretary, C. P. Flynn, Boston; treasurer, Frank M. Harris, Worcester. After President Cobb took the chair Wm. C. Durkee read the report of the committee on constitution and by-laws, which was approved after some minor changes. The object of this union is to aid in the formation of local branches of the Interstate League, and a subscription was started at this meeting to provide the sinews of war.

Those eligible for membership are the presidents, vice-presidents, secretaries and



Isaac E. Emerson.

The subject of this sketch, whose picture above will be readily recognized by a large number of very warm friends, is Mr. Isaac E. Emerson, president of the Emerson Drug Company, Baltimore, Md., the proprietors of Bromo-Seltzer, who was born at Chapel Hill, N. C., in 1855. He was educated at the University of North Carolina and after his graduation he acted as assistant demonstrator in the chemical laboratory of his college for two years. Then came to Baltimore, where he entered upon his career as a retail druggist and his practical experience in this line led him to the compounding of the celebrated remedy referred to.

While Mr. Emerson gives the strict attention of a shrewd and energetic man to his affairs he finds time for diversion from the streets as a member of the Athenæum and Pimlico driving clubs. He is also the owner of a four-in-hand tally-ho and of the gunning yacht "Susquehanna," anchored near Havre de Grace in the vicinity of the Maryland ducking shores, where he frequently entertains his friends.

Mr. Emerson is known among his associates as a liberal minded, open-handed good fellow, and in all his social relations in the city of his success his acquaintance is sought after and his friendship highly valued. [For this sketch and illustration we are indebted to *The Club*.]

treasurers of local bodies, county executive officers and the executive officers of the Interstate League.

Among those present were: Albert O. Hull, Central Falls, R. I.; E. K. Gridley, Pawtucket, R. I.; James Duggan, Norwich, Conn., and G. F. Soule, Manchester,

N. H. Massachusetts pharmacists noticed were: James H. Manning, Pittsfield; Thomas B. Nichols, Salem; G. C. Brock; Lowell; J. Allen Rice, Milford; A. R. Bayley and F. W. Reeves, Cambridge; H. S. Garcelon, Somerville; G. W. Cobb, Newton; and N. W. Styles, C. P. Flynn, Reuben L. Richardson, Fred L. Carter and John W. O'Meara, all of Boston.

Secretary F. W. Reeves of the Apothecaries' Guild of Boston and vicinity has been doing some missionary work in Cambridge and Somerville, and as a result has secured the signature of every druggist in these cities to the plan of the Interstate League. A meeting of these signers was held in Raymond Hall, Cambridgeport, on the afternoon of March 15, at which an organization was completed to be known as the Cambridge and Somerville Druggists' Association. Following a collation a business meeting was held, at which the following officers were elected:

President, Dr. A. R. Bayley, Cambridge; vice-president, Charles H. Crane, Somerville; treasurer, W. R. Achison, Cambridge; secretary, Fred. W. Reeves, Cambridge; directors, Messrs. J. H. Hubbard, George H. Cowdin, Albert E. Lynch, E. H. La Pierre and H. S. Garcelon.

A committee on by-laws and schedule of prices was appointed. It is expected that the prices will be as follows: 85 cents for \$1 articles and full prices for 50 and 25 cent goods, with possibly a few exceptions.

A social gathering of the members of the Alumni Association of the Massachusetts College of Pharmacy with lady friends took place at the college building on the evening of March 13. The evening was passed in social conversation and in listening to a musical entertainment, which had been provided by the officers of the association. Music was furnished by "Caswell's Pharmaceutical Orchestra," and there was singing by Miss Alice Clark and Mrs. and Miss Denton of Wellesley. President Talley has completed arrangements for another meeting of the A. A. for March 28, when the Rev. Mr. Benner, of Wellesley will deliver a lecture upon the Yellowstone National Park, which will be illustrated by stereopticon views.

Charles H. Bassett, Ph.G., 169 Tremont street, doing business under the name of Joseph T. Brown & Co., is financially embarrassed. Emery Grover has been appointed assignee and at a recent meeting of the creditors he gave out a statement showing the debts to be \$18,571.21, and the assets were estimated at \$13,352.73. No offer was made at this meeting, and Mr. Bassett was given time to make one.

A movement is in progress which will soon crystallize in the formation of an association of Berkshire County, Mass., druggists. Haverhill pharmacists are becoming interested in local organization. Geo. W. Cobb has visited Pittsfield and Haverhill recently and he is largely instrumental in interesting the craft in these cities in the league movement.

## New York.

The engagement is announced of Geo. B. Luks, the well known artist of *Truth*, to Miss Vorrath, and Mr. Luks is receiving the congratulations of his many friends in the drug trade, where he is deservedly popular. Mr. Luks is a son of E. C. Luks, the pharmacist of Royersford, Pa., and received his training in early life as a pharmacist in his father's store. His artistic inclinations were so marked, however, that he was sent abroad to study art and his brilliant success as an artist and illustrator shows this to have been a wise



move. An interesting feature of his work is that his large cartoons almost always convey a sermon at the same time that they amuse. Mr. Luks is a contributor to this journal, and now has in preparation an article on pharmacy in the Azores whence he has quite recently returned after securing many valuable sketches and studies of that out-of-the-way corner of the world.

William M. Townley, a prominent wholesale druggist of Newark, died on Saturday night at his home, No. 77 Pennsylvania avenue, Newark, of pneumonia. He was fifty-three years old, and leaves a widow, one son, and one daughter. Mr. Townley was the head of the Townley Drug Co. and of the Paas Egg Dye Co. of Newark. He always took an active interest in the New Jersey Association, of which he was the treasurer.

A. Ashfield Baker Co. is the name of the corporation which succeeds A. Ashfield Baker as manufacturer and dealer in druggists' sundries and novelties. The officers of the company are A. Ashfield Baker, president; F. M. Munn, vice-president, and W. A. Robbins, treasurer. The offices of the company are located in this city at 140 William street, while their factory is at East Orange, N. J.

Tilden & Co. of New Lebanon have added Arthur Lewis, formerly with the Russell Morgan Co., and J. R. Allen of Abbey's Theater Pharmacy to their New York force under Otway Latham, manager of the New York office. Mr. Lewis will attend to the city trade while Mr. Allen will take a part of Brooklyn as his special territory.

At the last examination of the New York Board, held on March 12, the following passed: Adolph S. Katzman, L. B. Wade, Chas. T. Webster, Paul Link, Chas. Störzer, Jr., Rich. Gruenwald. During the month 19 pharmacists were registered. The next examination will be held on April 9.

The many friends of Dr. R. G. Eccles, Brooklyn, will be pleased to learn that he has been successful in his efforts to prevent the opening of a saloon near the pharmacy of his wife, Mrs. Mary Eccles. The Commissioners of Excise met last Friday and refused to license the premises.

T. P. R. Loud, who has been with the firm of Merck & Co. for some years past, goes on the road for that firm, leaving his city desk to John Queeny. Mr. Loud is an old traveler and well known all over the United States, while Mr. Queeny is also a very popular and well-known salesman.

L. E. Feindt of South Orange has moved into his new store at the corner of Vose avenue and South Orange avenue. The fixtures, which are a highly artistic piece of work, were made by Wick, formerly Hubbard & Wick of Tenth avenue and Twenty-sixth street, New York.

C. F. Boehringer & Soehne, the widely known manufacturing chemists, are announced as a recent acquisition to the membership list of the Drug Trade Section of the New York Board of Trade and Transportation.

The New York Quinine and Chemical Co. have made a valuable acquisition to their force in the person of Thos. Cook, who is one of the most popular, successful and widely known men in the fine chemicals trade.

J. Alex. Whittall, formerly of Eighth avenue, returned recently from Sebastopol Cal., where he has been on a visit for the past 18 months, and has taken a position at Mrs. Griffin's pharmacy in South Orange, N. J.

M. C. McGrath, the well-known salesman, is now associated with the sundries department of Tarrant & Co.

T. J. Macmahon was the "feeble instrument," as he himself expressed it, that brought out an unusually large attendance of members at the annual meeting of the College of Pharmacy of the city of New York, held in the old college building, 209 East 23d street, on Tuesday evening, March 20. Ex-president Ewen McIntyre was there looking as fresh and as youthful as it is possible for a man of his advanced years to look. For two of the oldest members present this was stated to be the first occasion on which they had set foot within the college building; so it was evident there was a stiff contest on. The election of officers and trustees resulted in the scratching of the official ticket and placing on the list of trustees to serve three years the name of T. J. Macmahon. Stated in detail the balloting resulted as follows: Total number of votes cast, 90; president, Samuel W. Fairchild, 90; vice-presidents, Charles F. Chandler, 79; George Massey, 86; John R. Caswell, 89; treasurer, Horatio N. Fraser, 74; secretary, J. Niven Hegeman, 90; trustees to serve three years: Hermon W. Atwood, 88; Charles Osmun, 42; Gustavus Ramperger, 87; Charles Rice, 90; George B. Wray, 88; T. J. Macmahon 53. Only five trustees were elected.

After adjournment the members repaired to Delmonico's where a reception, tendered by Edward Kemp of Lanman & Kemp, was held. This proved in every respect a most enjoyable affair. The host, who is an old and honored member of the college, was toasted in a clever speech by President Fairchild. In responding, Mr. Kemp referred to the pleasure which it afforded him to meet so many old friends. He took his listeners back with him some 30 or 40 years to the time when Rushton, the elder Hegeman and Thomas Green were in business, and told a most amusing story of Mr. Green's ability as a concocter of egg-nog. In speaking of the college, he pictured the success which must follow the well directed efforts of its officers and trustees, and alluded to the benefits of education. Men of brain who could prove their right to positions of responsibility and trust were sure of retaining them; and speaking of his own firm, he said "the man who earns his epaulettes in the establishment of Lanman & Kemp wears them." Others who spoke were Ewen McIntyre, Wm. M. Massey, T. J. Macmahon, H. Graesser and Fred. Hoenthal.

"Well bought is half sold." Read the "trade notes" and market review every week.

### Interstate Retail Druggists' League.

The regular meeting of the New York City branch of the Interstate Retail Druggists' League was held in the Mott Memorial Hall, 64 Madison avenue, on March 16, at 8 P.M. President Osmun presided and there was a fair attendance of members. Secretary Morrison read letters from the following named firms who have agreed to co-operate with the League in securing signatures to the circular petition issued recently:

C. N. Crittenton Co., R. W. Robinson & Son, Lehn & Fink, W. H. Schieffelin & Co., and Tarrant & Co.

W. H. Ebbitt of W. H. Schieffelin & Co. sent a letter inclosing a list of names and assuring the League of his hearty co-operation and support in the good work.

M. F. Bender, the efficient treasurer of the organization, made a report in which he stated his experience with several prominent pharmacists who are not members of the League and whom he had endeavored to win over to League principles. All had expressed their sympathy with the objects of the local branch, and declared to him their willingness to aid in the good work in every way possible. It was elicited at this point that over five-eighths of the entire retail drug trade of the city had already subscribed to the petition of the League indorsing the Detroit plan. A communication from Henry Canning of Boston was read in which he expressed the conviction that if each member of the League could be brought to realize that the success of the organization depended upon himself, upon his punctual attendance at meetings and his individual efforts to interest brother druggists, the future of the League could be safely predicated—success would be assured. A letter of V. Kostka of the New York state executive was read by the treasurer. In this letter Mr. Kostka announced his intention of resigning his position as executive officer; but as this was a matter which concerned the parent body no action was taken.

Mr. Osmun spoke of the Nixon bill now before the Assembly in which it is proposed to increase the druggists' excise license from \$20 to \$50. The Saxton bill also came in for comment.

A. C. Searles, formerly of Brooklyn and now of New York, who was present, said he was pleased to note the turn which the discussion had taken and was convinced that nothing could contribute so much to the future success of the branch as honest endeavors on the part of its members to secure equitable legislation for the druggists of the whole state. He expressed it as his opinion, however, that it would be best to communicate with the committee of legislation of the State Pharmaceutical Association before taking definite action.

The officers were instructed to communicate with the committee on legislation of the State Pharmaceutical Association with reference to pending legislation. Mr. Reuter took occasion at this point to remind those present of the benefits which had been derived in the past from concerted and organized action by the retail pharmacists of New York; the privilege of exemption from jury duty being especially dwelt upon.

Before the matter adjourned a vote of thanks was on motion of the secretary tendered to THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for "the encouraging support which the paper has given to the efforts of the New York City branch to promote organization among the druggists of New York City."

Mr. Keenan responded for the paper, saying that the publishers were always happy to do anything likely to promote the interests of the retail trade, these being "The things we stand for." He was glad to observe that the paper enjoyed the entire confidence of the members, and this privilege he said it would be his duty to respect.

The meeting was then adjourned to the first Friday in April, when a large attendance is looked for. The especial subject of discussion will be pending legislation.

A congress of chemistry and pharmacy will be held in Naples at the beginning of next September. The congress will be divided into two sections—the one scientific, the other professional.

### Kings County Pharmaceutical Society.

After opening of the regular meeting for March on Wednesday afternoon the 18th and election of two new members, Messrs. Clarence O. Douden and Stephen L. Wood, President A. H. Brundage gave notice that the regular order would be suspended while a paper was read by Professor Aug. Drescher of Newark, giving a sketch of work recently done by himself in examination for

#### SALICYLIC ACID IN VIOLA TRICOLOR.

Prof. Drescher said that violas had long been known as having antiseptic properties. In Germany panzy is in common use as infusion and poultice for dressing wounds and bruises; consequently salicylic acid had been suspected, but not before isolated as free acid. Those who had before tried it claimed it to be present as sodium or potassium salt; one or two held that it was obtained by breaking down a glucoside present. He had obtained it alone by most simple methods, not from a glucoside, though such was present.

#### LOCAL ORGANIZATION.

Edward Alt gave an interesting statement of the proved value arising from permanent and aggressive organization as carried out in a good sized town close by the city of New York, always considered as about the worst location possible for such work. Yet the druggists there for a number of years had received pecuniary benefit and increased backbone as well as much social pleasure from working together for a common end.

#### INTERSTATE LEAGUE.

R. C. Werner reported in detail the progress of the local work upon Interstate League matters. Many had given their signatures to the League agreement, and few found any serious objections. He offered to meet any inquiries or questions for those present as yet unfamiliar with the work, of which a number were asked and all were explained.

#### TELEPHONE MATTERS.

Mr. France reported as chairman of the telephone committee recommending that the society give its active support toward the passage of the Gunt Telephone bill, an outline of which was published in THE DRUGGIST AND RECORD for March 1, page 110. The bill was indorsed and the regular legislative committee increased to six and sent up to Albany to aid in securing the passage of the bill.

### Class Notes.

*We would be pleased to hear regularly from every class in the Colleges of Pharmacy in the United States.*

#### Class of '94 Buffalo College of Pharmacy.

We had our class election in February, choosing the following officers: President, O. S. Salisbury; vice-president, Geo. H. Jones; secretary, Chas. St. John; treasurer, Guy L. McCutcheon; valedictorian, Archie I. Drake, M.D.; historian, Chas. E. Noble; poet, Orange A. Green; marshal, George A. Heiser.

We can boast of one thing, that is, our class colors, they are orange and green, named in honor of our poet, Orange A. Green.

The class as a whole is doing good work.

We have a lady in our class, Miss Cora Smith from Cleveland, Ohio, and she is doing good work.

We have a very fine Greek letter society

in connection with the college, the Beta Phi Sigma, and an excellent one of its kind.

The fifth annual class banquet was held at the Genesee, fifty members being present including the faculty. Charles St. John acted as toast master, introducing the following speakers: "Our Instructors," Guy L. McCutcheon; "Juniors, Seniors and Graduates," Dr. Gregory; "Ladies as Pharmacists," Orange A. Green; "Class of '95," L. A. Corning; "Banquet," Dr. H. M. Hill; "Where are we at," C. H. Caulkins; "Our Motto," O. S. Salisbury; "Difficulties of the State Board," C. Richards.

Dr. Vandenberg was present and was received with an ovation. The banquet hall was very beautifully decorated in flowers and evergreens.

CHARLES ST. JOHN.

Class Correspondent.

#### Senior Class University of Kansas.

Our class this year outnumbers any that has ever preceded it. We now have 28 regular students, of which two are ladies.

The officers of the class of '94 are Harry Fox of Atchison, president; Miss May Chappin of Leavenworth, vice-president; Perry B. Barber of Lawrence, secretary and treasurer.

We have a pharmaceutical association made up of students of the junior and senior classes, which meets every other Friday afternoon for the discussion of topics and questions out of the regular course of lectures in pharmacy and materia medica.

Our school is recognized to a greater extent each year by the people of our State and neighboring States and we hope to have a bill passed in the next legislature for the erection of a pharmacy building at the Kansas State University. We are very much crowded in our laboratories at present.

The arrangements for commencement have not yet been perfected, but the faculty are thinking of inviting a speaker from some neighboring college, and this, with an orator and an essayist from the class, will probably compose our commencement exercises.

PERRY B. BARBER.

Class Correspondent.

#### Senior Class; University of Minnesota.

The eight-months laboratory course in pharmacy is divided into three terms; the third term began March 1 and will continue until June. One of the leading features of this term is the continuations of the course in organic chemistry, which occupies eight hours weekly. It consists of practical and theoretical work.

The special course in bacteriology which began February 1 is proving very interesting and valuable; it will be continued to June. The object of this course is to extend the pharmacist's usefulness to the doctor.

The course in quantitative chemistry which began last fall will be continued to the 1st of June. There are 10 hours' work every week in this course.

A. B. Hart, member of the '94 class, was absent from the class the past week owing to illness. He is fully restored and at work again.

Preparations are being made and class meetings held frequently concerning commencement, which takes place June 7.

The lady member of the class, Miss Blanchard, is equal to her undertaking

and is keeping up with the progress of the class very creditably.

Dean Wulling is fully restored from his late illness, and as usual is hard at work in the interest of the students.

Arthur Von Rohr was unanimously elected class reporter at the late class meeting.

ARTHUR VON ROHR.

Class Correspondent.

#### Junior Class Notes, University of Minnesota.

Messrs. Sanderson, Slate, and W. H. Root, specials, are doing work with the class.

I. C. Olsen enjoys bi weekly visits to his home at St. Croix Falls, Wis.

Miss Alice Houlton, the only lady member of the class, was one of the charter members of the Theta chapter of the Phi-Delta society recently organized in the University.

Theodore Cook has been obliged to give up his work at the college, and return to his home at Prescott, Wis., on account of ill-health. His absence is much regretted by classmates and instructors.

The members of the class have decided to have their photographs inserted in the *Gopher*, the annual publication issued by the Juniors of the University. They will also be represented in it by a class history.

A class party is talked of. It is to be hoped that it will materialize.

The members of the class met March 8, and elected officers for the remainder of the year, as follows: President, A. H. Hillard; vice-president, G. W. Iltis; secretary, D. E. Farmer; treasurer, R. T. Burke.

The botany class reports very favorably of the work under Instructor C. A. Ballard. Bastin's College Botany is used as text book, and microscopic work is given in connection with it. The course covers a period of about twenty weeks.

In the pharmacal laboratory, under Dean F. J. Wulling, the subject of percolation, and the preparation of official tinctures, has just been taken up. Most of the other fundamental operations of pharmacy have been treated of in a systematic and thorough manner. As the work progresses, interest increases.

CHAS. L. CHAPPLE.

Class Correspondent.

#### An Agreeable Nutrient Tonic.

Dr. C. A. Ewald, senior physician to the Kaiserin Victoria Hospital, Berlin, in writing on the subject of predigested foods, says:

That preparations containing much albumose are most valuable for nutrition has been proved not only by experience gathered at the sick bed, but also by J. Munk's experiments on the exchange of substance carried out on animals with a preparation consisting mainly of albumose. Real advantage, however, can only be expected from any of these preparations, and therein lies the insufficiency of experiments on animals with preparations of this kind—if they have a taste acceptable to the human palate for a long time running.

This consideration induced us to try a preparation brought out by the brewing firm of L. Ross & Co. under the guidance of the well-known Dr. Friedr. Witte of Rostock.

This peptonized beer (Kraft beer) is brown and strong with good froth and pleasant taste, something like Stout with a bitter bytaste.

Analyzed in the manner of Kjeldahl-Argutinsky, the beer contains 0.610 per cent. of nitrogen in the shape of albumose, or a bottle of 25 centiliters of beer 1.525 grms. nitrogen, equal to 0.53 grms. albumose or 43 grms. of meat.

The beer was administered to invalids and convalescents in the hospital and in private treatment, and taken by them for weeks, in two cases throughout the whole summer. Without any exception it agreed well with the patients, and what deserves to be specially mentioned, it never called forth diarrhoea.

Some patients stated that their appetite was decidedly better while taking the beer than either before or after

### The "Konseal."

The great advance that has been made during the past few years in synthetic remedies has helped to bring "Konseals" into greater prominence. The desirability of getting the effect from several of the newer remedies, rapidly, has created a need for this simple method of prescribing, and it is not surprising, therefore, that prescriptions of medicinal powders in "Konseals" are rapidly gaining favor with the medical profession. The essential qualities of a perfect vehicle for powdered drugs are: convenience of form, elasticity, tastelessness, ready solubility, and easy digestibility. These qualities are possessed in a very marked degree by the "Konseal;" and the advantages possessed

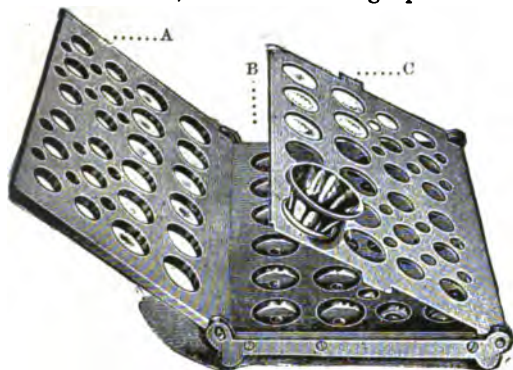


Fig. 1.

by this method over loose powders or pills are:

- (1.) Drugs or medicines are rendered perfectly tasteless.
- (2.) The ingredients are not compressed into a hard and almost insoluble mass by the aid of an excipient.
- (3.) A much greater freedom in prescribing is possible.
- (4.) After dipping in water, the solubility of the coating and its great flexibility render them very easy to swallow.
- (5.) The personal responsibility of the dispensing chemist insures the purity of the drugs employed, a fact not to be overlooked.

(6.) Prescriptions when put up in "Kon-

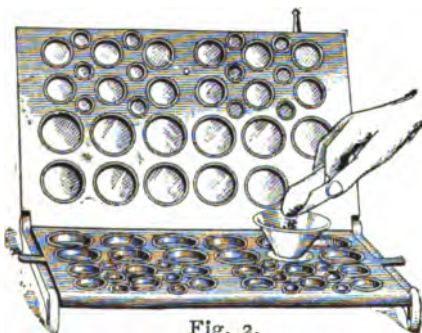


Fig. 2.

seals" are dispensed in an extremely quick, neat and cleanly manner, and present a most elegant appearance.

(7.) None of the medicine is wasted, as often happens when powders are used.

The filling and closing apparatus consists of three nicked plates, the manipulation of which is extremely simple, as may be seen by carefully following the instructions.

The "Konseals" are pressed with the fingers into the inner spaces of plates A and B. (See Fig. 1.)

Plate C is then folded over on to plate B, and the powders poured into the "Konseals" which have been placed in plate B. Large doses are more easily manipulated by means of the funnel and pressed down

with the thimble furnished for the purpose.

When the "Konseals" are all filled, plate C, is removed from plate B, and the damping roller (not too wet) passed over the "Konseals" in plate A (see Fig. 2), which plate is then closed over plate B. A slight pressure closes all the "Konseals," which on opening the apparatus are found adhering to plate A. They are easily pushed out by the fingers, or with the thimbles supplied for this purpose.

That this apparatus stands the test of practical use is amply demonstrated by the testimonials published on page 25 of this issue. For fuller details, free samples and prices write the sole agents for America, J. M. Grosvenor & Co., 108 Milk street, Boston, mentioning this journal.

### Croton Oil as a Rubefacient.

Connolly's croton oil plaster offers a means of applying this excellent rubefacient in a manner which permits of its action being definitely determined both as to extent and severity. The value of croton oil has long been conceded, but the difficulty of accurately graduating its action to just the desired degree and the trouble involved in applying it have militated against its use. These difficulties have been overcome in Connolly's croton oil plaster, descriptive circulars of which can be obtained by addressing the Joel A. Connolly Plaster Co., Boston, Mass. They offer special inducements to druggists to introduce these plasters.

### Dabrooks Perfumes.

We wish to call your attention to the special offer of Williams, Davis, Brooks & Co. of Detroit,



manufacturers and proprietors of Dabrooks' perfumes, which will appear in our next issue. Their line of perfumes, though on the market only comparatively a short time, has, by the quality and style of package, forged its way to the front, wherever they have been introduced. They are put on the market by an exceptionally enterprising firm, and any product from their laboratory is a guaranty of the highest quality attainable.

The accompanying cut represents their style of bottle, which is used from one-half to eight ounce. All bottles made to hold full measure. They put out a full line of staple odors at \$3 per pint in eight ounce G. S. bottles. Several special concentrated odors at \$4 per pint a complete line of bottle goods. The discounts offered on these goods in quantity are, very liberal, considering the high standard of quality. Enterprising druggists who want to handle a fine line of perfumes sold *only to the drug trade*, should not fail to write for their complete illustrated price list.

Read the "trade notes" and the market review every week if you want to keep posted.

### Changes in Jobbing Prices.

The changes which have occurred during the past month in the quotations of the prices at which retailers can buy drugs and chemicals in ordinary lots are referred to in the following paragraphs:

ACETANILID is easier and is now quoted 40 @ 55c.

CITRIC ACID is a little weaker at 44 @ 48c.

CAMPHOR has declined, and is now quoted 42 @ 48c.

GUM ARABIC prices have been revised as follows: First picked, 55 @ 60c.; powdered, 65 @ 70c.; second picked, 40 @ 45c.; powdered, 45 @ 50c. This is a decline of 5 to 15c.

COD LIVER OIL, Norwegian, has advanced materially in the interval and barrels are now quoted \$30.

OIL OF LEMON is lower, and we quote the range at \$1.60 @ \$1.75.

OIL OF PENNYROYAL has declined to \$1.40 @ \$1.75.

PIPERAZINE, pure, in tubes is marked up 50c., being now quoted \$1.50. Ounce bottles are higher at \$4.25.

RESORCIN, white, can now be obtained down to 25c., the range being 25 @ 30c.

IPECAC ROOT is lower owing to new arrivals, and is now quoted \$1.60 @ \$1.75 for whole and \$1.75 @ \$2 for powdered.

LOVAGE ROOT is higher and firm at 75 @ 85c.

ORRIS ROOT in fingers has advanced and is now quoted \$1.50 @ \$1.75.

CANARY SEED is firm with 6c. quoted as an outside figure.

CELERY SEED has advanced to 20 @ 25c. and is firm at these figures.

POPPY SEED, blue, is firmer but does not change from 12 @ 15c.

QUINCE SEED is lower, and is now quoted 45 @ 50c. for German.

STROPHANTHUS SEEDS have declined materially since our last report, \$1 @ \$1.25 now representing the quoted range.

SEIDLITZ MIXTURE has declined in sympathy with the raw material, and can be obtained at 18 @ 20c.

TETRAOL is out of market.

### Reduction in Price of Piperazin.

Messrs. Lehn & Fink have issued the following to the trade:

We have much pleasure in announcing that we are now enabled to reduce the price on piperazin-Schering, and have this day reduced the same just one-half; that is to say, while retaining the same schedule of selling prices as heretofore, we furnish double the quantity in each vial; 10 grammes now instead of five grammes as heretofore.

Please note following scale of prices of piperazin-Schering, in 10 gramme vials, in single vials, per vial, \$1.50; in lots of 80 vials, per vial, \$1.35; in lots of 60 vials, per vial, \$1.25.

We also furnish piperazin-Schering in compressed tablet form, each tablet consisting of 1 gramme of the drug without admixture, 10 tablets in a tube. Price per tube, \$1.50; larger quantities at same schedule of prices as above.

NOTE.—We continue to furnish piperazin in 10 gramme vials partly for the advantage in dispensing and partly because the metric system of weights is now official in accordance with the new United States Pharmacopoeia. For convenience of comparison between gramme and ounce packages please note that 1 oz. piperazin-Schering, in original 10 gramme vials, would cost about \$1.50 in 60 vial lots, and proportionately more in smaller quantities.

### PIPERAZIN WATER, SCHERING'S.

Put up in cases containing two dozen bottles. Quart bottles, per dozen, \$5; in 1 gross lots, \$60 less 10 per cent.



## To Manufacturing Pharmacists:

It gives us great pleasure to announce that the new issue of the United States Pharmacopœia (just out of press) has substantially given official sanction to the Pepsin test as adopted by us January 4, 1893. The method of the revised United States Pharmacopœia is almost in every detail literally our own, and we, therefore, occupy the unique position of being (without doubt) the only manufacturers in the world using a Pepsin test, not only consistent as to practical manipulation, but representing more nearly than any other the exact amount of acid found in the gastric juice of a healthy human stomach. Heretofore our method has been ignored, sneered at and controverted. We have been ridiculed as "pork packers," etc., our endeavors to establish a scientific test treated as presumptuous. Happy are we now to know that we alone have been using the test now made official. The following is a synopsis of the methods that have been most commonly used:

	U. S. P., 1880	F. B. & F.	P. D. & Co.	NAT. FOR.	CUDAHY	U. S. P., 1890
Albumen - - - -	10.0	10.0	10.0	10.0	10.0	10.0
Acid 32% - - - -	1.5	0.464	0.938	0.500	0.625	0.625
Water - - - - -	100 cc.	ab. 36 cc.	100 cc.	100 cc.	100 cc.	100 cc.
Time - - - - -	5 to 6 hours	6 hours	6 hours	1 hour	6 hours	6 hours
Temperature - - -	100° to 104°	104°	104°	125°	100° to 104°	100° to 104°

We have always held that a method should be adopted which used the same amount of acid as is found in the gastric juice, and which should, with proper manipulation, develop the highest proteolytic power. Roberts, in his "Digestion and Diet," on page 13c, shows that 0.2% acid gives the best results, while if more or less is used the activity of the ferment is decreased. When we, fully a year ago, commenced to use 0.2% acid in Pepsin tests, while we were satisfied it would in time be recognized as the correct amount, yet we were as certain that our action would be misunderstood and derided as has been the case.

Our facilities for producing digestive ferments are unusually large. Our supply of stomachs is equal to, if not superior to, that of any other producer. We are able to deliver the stomachs to our laboratory within half an hour after the killing. They have been placed on ice in the mean time, consequently there is no such opportunity for septic contamination as if the stomachs had been shipped long distances and treated to arrest decomposition.

We are producing almost every grade of Pepsin from 1/1,000 to 1/10,000, whether for manufacturing purposes or for dispensing uses. Our REX BRAND, particularly, is of high grade, soluble, non-hygroscopic and almost entirely free from Peptone. We shall be very glad to quote you our Pepsin in bottles or in bulk at favorable prices, if you will state your wants. Pancreatin we are also large producers of, as also Beef Extract, Beef Peptone, Wine of Peptone, Ox Gall, Blood Albumen, etc., etc.

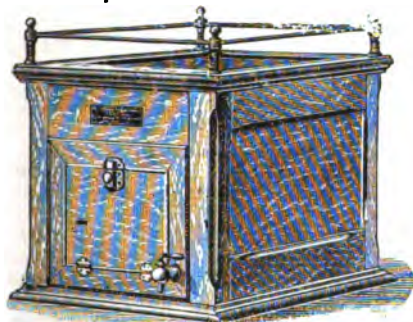
Yours truly,

THE CUDAHY PHARMACEUTICAL CO.

New York Branch, 57 North Moore Street.

South Omaha, Nebraska.

## ICE CREAM CABINET.



The  
Ice Cream  
Soda  
Business  
Robbed  
of all its  
Terrors.

[PATENTED, MARCH 19, 1890.]

The above cut represents our **Ice Cream Cabinet**, which is especially adapted for Soda Fountains, for serving Ice Cream Soda. The Cabinet is a handsome article of furniture; capacity about six quarts; selected ash or oak, finely finished, with nickel trimmings and faucet, ornamented posts, and nickel rods on cover. The drawer containing the Ice Cream is of tin, which runs into a chute made of galvanized iron of which the lining of the Cabinet is also made, thus preventing the ice or salt coming in contact with the receptacle holding the Ice Cream.

The Cabinet requires packing with ice and salt only once a day, keeping the Cream in good condition. It is thoroughly practical, avoiding any sloppy or wet surroundings.

Kept on end of counter or side of the fountain, it will be found something of an advertisement in its novelty.

Send for Catalogue of Soda Fountains, Necessities, etc.

No. 1, outside dimensions, not including faucet or rail, 15x15x21 in. \$15.00 net.

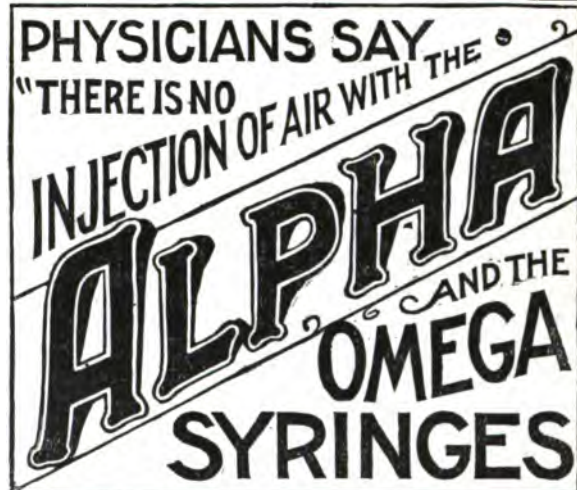
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NO. 52 PARK PLACE,  
NEW YORK.

18 BLACKSTONE STREET,  
BOSTON, MASS.

Kindly mention this Journal when writing to Advertisers.



## ADVANTAGES. ∴

The "ALPHA" and the "OMEGA" SYRINGES are perfectly simple in construction.

They have no more parts than the old style or ordinary Syringes.

They entirely obviate the intermittent, and in many cases, painful action of Pump Syringes.

They absolutely prevent the admission and consequent dangerous injection of air, so common with all intermittent or old style Syringes.

Unlike all Fountain, Rubber Bag or Pump Syringes the flow is not only continuous, but can be made either gentle or strong at the will of the user, the pressure of the thumb and forefinger being sufficient to produce a full stream.

The steady flow can be increased, lessened or stopped at will.

The continuous flow of the injecting fluid through the nozzle while the Syringe is in use prevents the fecalized fluids from being drawn back into the rubber bulb and tube, which often happens in the use of intermittent Syringes, rendering them offensive.

F. O. B. New York, or freight prepaid east of Missouri River on \$100 lots; 80 days cash, or 1 per cent. discount for cash in 10 days.

#### EXCHANGE.

In order to promptly retire the five gramme vials of piperazin-Schering, we ask you to kindly send us at once an order for 80 or 60 vials of the new 10 gramme vials, and on receipt of new stock to return whatever you have on hand of the old style packages; we will bill the new order at schedule rates, and when the returned stock is received will credit your account at the same rate with the number of vials returned.

This is practically an exchange, and above plan is adopted as most convenient and expedient. *We cannot consent to an exchange or to allowances on any other basis.*

We hope to receive your order for desired new stock at once. Remember, we are advertising piperazin continuously; the demand is increasing constantly, and with reduced prices—the only barrier heretofore to greater popularity—the remedy is bound to take its place as a staple. You can safely order the quantity to get best price; we guarantee the sale.

The above offer must be accepted promptly. We hold it open until April 1, 1894; after that date no further reclamations will be allowed. LEHN & FINK.

## Review of the Wholesale Market.

NEW YORK, March 21, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The month thus far has not proved a very busy one among importers and dealers in drugs, dyestuffs and chemicals, and trade may be said to continue light in all departments. The jobbing houses report a moderate amount of business doing in broken packages, purchases in a large way being an exception. Regarding prices, the tendency upon general goods is to greater firmness, though in reviewing the changes of the week the fluctuations are found to be pretty equally divided between higher and lower values. Opium is again a shade lower. Cod liver oil is firm at an advance. Naphthaline is easier. Cacao butter is meeting with increased attention. Balsam Peru is firmer. New crop jalap is in improved demand and firm. Quinine quiet and steady.

#### ADVANCED.

Cod liver oil.  
Cloves.  
Ipecac root.  
Orris root, fingers.  
Balsam Peru.  
Damiana leaves.

#### DECLINED.

Celery oil.  
Oil of peppermint.  
Opium.  
Orange oil.  
Quicksilver.

#### DRUGS.

ALCOHOL continues firm at the Trust range of \$2.24 @ \$2.28 less the usual seven cents per gallon rebate. From the hands of outside producers \$2 @ \$2.02½ net is quoted.

BALSAMS COPAIBA, Fir, and Tolu are without important change. A parcel of 20 cases Maracalbo balsam copaiba, which arrived a few days ago, is held at 36c. by the importer. There is little inquiry at the moment. Peru is scarce and quoted at \$1.65 inside.

BARKS.—Cascara Sagrada in limited quantities can be obtained at 5c., though for round parcels an advance upon this price is asked. Cascarella is in improved

jobbing demand, and we hear of numerous small sales at 7 @ 9c. for ordinary and sifted respectively. Soap is maintained with some show of firmness at the previous range; advices from the Hamburg market indicate increased firmness, but values here are unchanged. We quote the range at 3¼ @ 4c.

BUCHU LEAVES, short, continue in moderate demand, with jobbing sales within the range of 10 @ 12c.

CANTHARIDES remain quiet, though holders are firm in their views, Chinese offering at 28 @ 30c., and Russian 65 @ 77½c. for whole and powdered as to quality and quantity.

CACAO BUTTER is in good demand, especially foreign bulk, which has sold freely during the interval at 32c. spot and 31½ to arrive.

CASTOR OIL is without improvement. Jobbing sales are making at 14½ @ 15c. for barrels, and 15 @ 15½c. for cases.

CASSIA BUDS are inquired for, but the small available quantity and firm prices restrict trade. The market is well sustained at 18 @ 18½c.

COD LIVER OIL, Norwegian is seasonably active, and the market is firm in tone at an advance over the quotations of the previous week. The stock here is not large and orders for quantities over five barrels will not be filled by local holders except at an advance on the market quotation of \$25. The fact that the import cost from primary sources is above the quotations of this market makes holders indifferent sellers, a further appreciation being looked for.

COLOCYNTH APPLES, Spanish, are a shade lower with sellers at 19 @ 24c. the inside price for full packages; but the article at the moment is neglected and the market is quiet.

CUBE BERRIES are very slow of sale and prices are unchanged at the previous range.

CUTTLE BONE, Trieste, continues in good demand for purposes of consumption at the present low range of 9 @ 10½c.

DAMIANA LEAVES have sold at 11c. recently, but 12½c. is now asked for spot and 12c. for future delivery.

ERGOT is without new feature of interest; supplies are obtainable at the quoted range.

GLYCERIN is dull and unsettled. The nominal quotations for drums is 12c. and barrels 12½c., but these figures can be shaded.

MENTHOL, Japanese, continues scarce and the small available supply is held firmly at \$5.

MORPHINE is jobbing fairly at a slight cut on manufacturers' quotations. From the hands of makers P&W morphine is held at \$2.50 in eighths; from outside hands \$2.45 is quoted as acceptable.

NAPHTHALINE is quiet and easy. Balls to arrive are offered at 3½c. Flake is held at 3 @ 3½c.

OPIUM has undergone no changes of importance during the interval; and the markets present a dull and quiet appearance. The demand is lacking in spirit and prices as a consequence have receded a fraction, the quotation of the market now standing at \$2.85 for cases; and this figure, it is stated, can be shaded upon a firm bid for quantities. The jobbing price is quoted \$2.85 @ \$2.90. Powdered is a trifle easier with sellers at \$3.60 @ \$3.65.

QUININE, foreign continues in firm position with a fair jobbing inquiry at the quoted range. Supplies in second hands are held at 23¼ @ 24c. regular terms, or 23½c. upon a cash basis. Domestic is firm upon the basis of 27½c. for large bulk.

SENNA LEAVES.—Alexandria siftings

have been sold during the week to the extent of 2,000 lbs. at 6½c.; natural is firm at 18 @ 25c. Tinnivelly is active at 6 @ 18c. as to quality.

SOAP. Cont'l's, white, is in demand, but the spot stock is about exhausted. Forward purchases are being made at 9½ @ 9¾c.

VANILLA BEANS continue in moderate active request, the sales during the week marking in the aggregate a good distribution. Whole Mexican are offered at \$6.50 @ \$13 and the market is firm at these figures.

#### DYESTUFFS.

CUTCH is held with increased firmness with the quotation firm at 5¼ @ 6c. for SM. Inferior grades quoted at 4½ @ 5c.

DIVI DIVI has not changed from \$55 @ \$56, and we hear of numerous sales for consumption at this range.

GAMBER is in better supply and prices are a shade easier, the store price having receded to 4¼ @ 4½c. for steamer goods, and 4½ @ 4¾c. for sail in a quantity way.

MADDER, Dutch, continues to meet with moderate inquiry at the range of 10½ @ 11c. for No. 1, and 9½ @ 10c. for No. 2 as to quantity.

NUTGALLS, Blue Aleppo, are selling moderately at the range of 13¼ @ 14½c.

SUMAC, Sicily, is steadily held and jobbing sales are making at \$72.50 @ \$77.50.

#### [CHEMICALS.]

ACETATE OF LIME has met with increased inquiry during the week, and we are reported numerous sales for consumption at 90 @ 95c. for brown and \$1.60 @ \$1.75 for gray.

ARSENIC, white, continues to meet with a fair steady inquiry and the market is firm at 3¼c. Red Saxony held at 6¼ @ 6½c.

BLEACHING POWDER is dull, though no quotable change is announced. German is held at 2½c. and English 2¼ @ 2½c. as to quantity.

CARBOLIC ACID is neglected at the moment. Best grades English are held at 13c. and 20½c. for drums and bottles respectively, though German goods are offered down to 11c. and 17c.

CHLORATE OF POTASH is quiet at nominally unchanged prices. German crystals quoted at 14¼c. and English at 14½c.

BLUE VITRIOL is held in firm position, with 3¼ @ 3½c. quoted as inside in most instances; up to 3¼c. is asked for small lots.

CARBONATE OF AMMONIA is jobbing fairly at 8½c. in casks.

CAUSTIC SODA continues in fair demand. \$2.50 @ 2.65 asked for 70 @ 74 per cent. according to test and quantity.

CITRIC ACID is dull at nominally 42½c. for barrels, and 42¼ @ 43c. for kegs.

CREAM TARTAR is maintained steadily at 17½c. for crystals and powdered. Recent advices to hand from foreign markets indicate a decidedly stronger feeling for the crude material.

NITRATE OF SODA has been in active request, and the tone of the market is strong. We quote the range at \$2.10 @ \$2.12½.

OXALIC ACID is in moderate request and firm at 6½ @ 7c. for German and English as to quantity.

SAL AMMONIAC, white grain, German, has sold in a small way up to 7c.; we quote he range 6¼ @ 7c. as to quantity.

SAL SODA is passing out to consumers at 75 @ 85c. as to quality.

QUICKSILVER continues to offer at 44 @ 45c. with moderate sales at this range.



# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIV. No. 13.

NEW YORK, MARCH 29, 1894.

WHOLE No. 292.

AMERICAN DRUGGIST PUBLISHING COMPANY,

37 College Place, New York.

A. R. ELLIOTT, President.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

INCREASING business has necessitated an enlargement of premises, and the business department of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD now occupies the entire front of the building presently occupied by it at 37 College place, New York. A cordial invitation is extended to our friends on the subscription and advertising lists of the paper as well as to all pharmacists to pay us a visit in our new office home.

Read the "trade notes" and the market review every week if you want to keep posted.

## A NEW LIQUOR ICENSE BILL FOR EW YO K.

THERE has been a healthy development in the line of a loftier sentiment on the part of pharmacists as regards the responsibilities which rest with them in the matter of the sale of liquors and narcotics. The ranks of those who refuse to allow their shops to become the means for a semi-decent place for the indiscriminate sale of intoxicants are steadily swelling.

There is therefore some doubt whether the proposed change in the excise law will meet with the unqualified approval of the pharmacists themselves even if it could be passed in the face of the determined opposition that will probably be offered to its passage by the retail liquor dealers.

The text of the law is as follows. The parts in brackets are in the old law and are to be omitted; the parts in italics are new:

SECTION 2. Subdivision five of section nineteen of the excise law is hereby amended to read as follows, and to take effect immediately:

5. A license to the keeper or keepers of a drug store, permitting sales therein (only upon a physician's written prescription to be but once used), or strong or spiritous liquors, wines, ale or beer [not to be drunk on the licensed premises] in quantities of less than five gallons for medicinal, artistic and sacramental purposes, which shall be known as a druggist's license and for which the fee shall be fifty [twenty] dollars. A druggist shall not be licensed under this subdivision unless he is a duly licensed pharmacist, and shall not be granted any other license under this act.

SEC. 2. Chapter four hundred and two of the laws of eighteen hundred and ninety-two is hereby repealed.

As the law now stands the pharmacist must pay a license of \$20 for selling liquors on prescription alone, and by paying an additional fee of thirty dollars he would be given the privilege of selling for medicinal, mechanical, and sacramental purposes even without a prescription. If the druggist really paid the \$20 fee in every instance for selling on prescription only it would be better for him to pay the additional \$30 and then have the privilege of selling independently of a prescription. A fee of twenty dollars for a prescription license is, however, unjust, as there are not a hundred druggists in the State whose sales of potable liquors on prescription would amount to twenty dollars in the course of a year. In point of fact there are

a good many eminently respectable and law abiding pharmacists who have no State liquor license of any kind, and this state of things is tacitly agreed to because the authorities know that the privilege is not being abused. If, however, a pharmacist is forced to take out a fifty dollar license he will be almost compelled to make an effort to sell enough liquor to repay him for the license. To do this he will have to put up liquor in bottles and direct attention to it, thus placing himself on the same plane as the corner grocer.

Even to those who have no scruples as to the sale of liquor the bill does not present any very attractive features so long as they really confine their sales within the strict limit of the law, for the sales of liquor for legitimate medicinal purposes is not by any means large. It will be seen, therefore, that the proposed change is by no means an unmixed good.

One of the dangerous features of the bill is the opportunity it would offer for any unscrupulous person posing as a pharmacist to covertly conduct a grogery. This danger would be materially lessened by lodging more police power with the boards of pharmacy, and giving them authority to revoke both the liquor license and the pharmaceutical license where it is proven that they have been put to improper use.

## Invaluable to the Student.

Editor AMERICAN DRUGGIST:

The value of your little "Quiz Box" can hardly be overestimated. To the student it is invaluable as a test of his requirements for examination and to the old pharmacist it brings a brightening and furbishing of the theoretical portion of his profession which he has long since relegated to his juniors.

Recommend the "Quiz Box" by all means, for it will be of benefit to everybody.

JOHN T. OGLE.

NEW YORK CITY.

## Replies from Maine to Mexico.

Editor AMERICAN DRUGGIST:

The very large number of replies received from our little advertisement in THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD offering to send five sample cigars for 10 cents was really a great and very agreeable surprise to us. The replies came from every quarter from Maine to Mexico and give convincing evidence that your journal is a very valuable advertising medium.

GOOD VALUE CIGAR AGENCY.

NEW YORK CITY.

## Analytical Notes.

**The Determination of Alkali in Alkaline Arsenites.**—Cochineal is indifferent to arsenious acid, on which account it can be used to determine the total alkali in alkaline arsenites, the examination of which resolves itself into the titration of the arsenious acid with iodine and the determination of the base.—*G. Fevre, Jour. Pharm. Chim.*

**Chloral alcoholate in chloral hydrate** may best be detected, says Hirschon (*Pharm. Zeit. für Russ.*) by the nitric acid test recommended by Van Ankum and Schaer. When 1 Cc. of nitric acid of a specific gravity of 1.88 is poured over 1 gramme of chloral hydrate there should not be any yellow vapor evolved either at the temperature of the room or after warming for ten minutes.

**Cottonseed Stearin and Maize-oil.**—The comparatively scanty literature concerning cottonseed stearin and maize-oil and the considerable use of the former as an adulterant of lard, have led F. Hart (*Chem. Zeit.*, 1893, xvii., 1522) to give the analytical figures obtained by the examination of samples obtained direct from the manufacturer. Spuller's results for maize-oil are appended for the sake of comparison:

	Cottonseed Stearin.	Hart.	Maize-oil. Spuller.
Color and consistency	bright yellow; buttery	dark brown; fluid	—
Specific gravity	0.867 at 100°C.	0.9239 at 15°C.	—
Melting-point	30–31°C.	—	—
Melting-point of fatty acids	45.5–46.5°C.	25°C.	—
Free fatty acid calculated as oleic acid	neutral	0.75%	—
Hegner's number	96.3	95.7	94.7
Saponification number	194.6	189.5	188.1–189.8
Saponification number of fatty acids	—	—	198.4
Iodine absorption	93.6	117.0	119.4–119.9
Iodine absorption of fatty acids	—	—	125.0
Unsaponifiable matter	0.56%	1.55%	1.35%
Rise temperature with sulphuric acid	48°C.	60.5°C.	56.0°C.
Color reaction with sulphuric acid	dark purple red	fine dark red	—
Reaction with Bechi's reagent	deep black	slightly darkened	—
Reaction with Wellmann's reagent	dark green, fine blue with NH <sub>3</sub>	dark green, fine blue with NH <sub>3</sub>	—

From these figures it appears that, although cotton seed stearin is well adapted for use as an adulterant of margarine and lard, yet it can be fairly easily detected by the determination of the iodine absorption, by the rise of temperature with sulphuric acid, and by Bechi's and Wellmann's tests.—*The Analyst.*

**Detection of Biliary Pigments in the Urine.**—Dr. Ad. Jolles has recommended (*Int. Pharm. Anz.*) the following modification of his test for the presence of biliary pigments in the urine. Put 50 Cc. of the urine to be examined into a glass cylinder about 25 Cm. high and 8 Cm. in diameter provided with a glass stopper. Add a few drops of diluted hydrochloric acid, then add barium chloride in excess and 5 Cc. of pure chloroform, and agitate the solution thoroughly for several minutes.

Then allow the cylinder to stand about 10 minutes so that the chloroform and the precipitate may settle to the bottom. Should a portion of the precipitate remain suspended in the liquid, as is occasionally the case with viscid urine, the tube should be slowly waved to and fro, when the precipitate will settle down. Now draw off the chloroform and the precipitate with a pipette and put into a test tube. The small quantity of urine that will also be drawn off does not affect the test. Put the test tube into a water bath heated to about 80°C. At this temperature the chloroform will all be evaporated in about 5 to 10 minutes. Then allow the test tube to stand a few minutes at the temperature of the room, when the supernatant liquid can easily be poured off. This precipitate is distinctly colored by the presence of 0.1 per cent. of bile. Allow three drops of concentrated nitric acid, to which about 83½ per cent. of fuming nitric acid has been added, to trickle down the sides of the tube, and either immediately or after a few minutes the characteristic color ring of bile will show itself on the bottom of the tube. In the presence of 0.2 per cent. of bile the characteristic blue and green rings are easily discernible. By the use of 100 Cc. of urine the presence of bile is capable of easy and certain recognition.

## The Analysis of Rubber Goods.

D. Holde, continuing his investigations on the methods for the proximate analysis of rubber goods (*The Analyst*, xviii., 147), has endeavored to ascertain whether the fact mentioned by Henriques in the latter's papers on the same subject (*The Analyst*, xviii., 13), that ordinary organic solvents extract an appreciable amount of matter from pure rubber, invalidates his (the author's) process for the determination of mineral and fatty oil in rubber mixtures. The solvent used by the author is ether-alcohol in the proportion of 4 to 3, and the chief difficulty apprehended was the possible necessity for repeated extraction to remove the whole of the fatty or mineral oil, as by such repetition the amount of extract from the rubber itself would be unduly increased. Experiments were therefore made to determine whether satisfactory extraction of the oil without too great solution of the rubber could be secured. The general procedure consisted in reducing the rubber to as fine a state of division as practicable by filing it with a clean file, and extracting it on an ordinary filter paper with known quantities of the solvent (ether-alcohol), evaporating the solution and weighing the residue. This was done with pure rubber, and with the same rubber which had been allowed to soak up known amounts of various oils. The chief results are recorded in the following table:

Kind of oil and rubber.	Per cent oil used.	Per cent oil found.
White erasing rubber plus rape oil.....	22.1	22.1
White erasing rubber plus rape oil.....	12.9	14.1
White erasing rubber plus rape oil.....	18.5	20.8
White erasing rubber plus rape oil.....	26.8	28.4
White erasing rubber plus cottonseed oil.....	59.8	59.7
Rubber cork plus rape oil.....	15.7	12.9
Rubber cork plus rape oil.....	26.2	24.8
White rubber tube plus rape oil.....	26.7	23.7
White rubber tube plus cottonseed oil.....	39.3	37.7
White rubber tube plus cottonseed oil.....	60.8	58.6

The samples of rubber yielded amounts of soluble matter, consisting of the oily constituent of rubber and free sulphur, varying from 8.7 per cent. to 7.1 per cent. The values given above for the quantity of oil found have been corrected by the deduction of 5 per cent. from the percentage actually obtained, that being a fair mean from the results of the experiments

on pure rubber. In general 60 Cc. of the solvent were used, although 30 Cc. were found sufficient in some cases. The chief cause for the discrepancies of the observed and true percentages of oil is the variation of the quantity of soluble matter yielded by the rubber itself. Greater accuracy could be attained if necessary by the determination of the free sulphur in the soluble matter, thus eliminating one of the two unknown quantities.

## Detection of Saccharin in Wines, Liquors or Beer.

The isolation of saccharin from wines and liquors or beer, by means of a separatory funnel and immiscible solvent is not advisable, says E. Spaeth (*Zeitschrift für angewandte Chem.*, 1893, 579), since gelatinization of the mixture is very apt to occur, which renders the separation of the solvent a tedious and troublesome operation. The author proposes the following method, which is somewhat similar to that used for the separation of glycerin from wines or beer. In operating with beer, unless the hop resin be previously removed, it is extracted along with the saccharin, and masks the sweet taste of the latter. For wines and liquors the sample is evaporated to 10 or 20 Cc. with coarse sand in a porcelain dish, and the residue, after treatment with 1 or 2 Cc. of phosphoric acid, is extracted by gently warming it on the water bath with a mixture of equal parts of ether and petroleum ether (b.p. 60°), and breaking it up with a glass rod. The solution is filtered through purified asbestos (filter paper takes up saccharin) and the extraction until 200 to 250 Cc. of filtrate have been obtained. The solvent is next distilled off on the water bath, and the residue freed from the last traces of it by warming and blowing in air. A few drops of a well-diluted solution of sodium carbonate are then added to dissolve the saccharin, which may here be detected by its taste, and the contents of the flask are washed into a porcelain dish and evaporated nearly to dryness. From 1 to 2 grammes of solid sodium carbonate are now added, and the mixture is gradually added in small portions to fused potassium nitrate. The melt is dissolved in water and the sulphuric acid in it determined.

For beer, the hop-bitters are first removed by precipitation with copper nitrate. 500 Cc. of the beer are mixed in a dish with a few crystals of copper nitrate, whereby the hop-bitters are thrown down as a flocculent precipitate, which, however, need not be filtered off. The liquid is evaporated to a thin syrup, a sufficient quantity of coarse sand and a few Cc. of phosphoric acid are added. The extraction, with a mixture of ether and petroleum-ether is conducted as described for wines. So little as 0.001 per cent. of saccharin can be detected by the sweet taste of the sodium carbonate solution of the ether and petroleum-ether residue. The estimation of the saccharin may be performed by fusion with potassium nitrate as described above.

When very small quantities of saccharin have to be estimated a larger quantity of beer must be used, in which case the sandy residue becomes too large and unwieldy for extraction with the solvent. In such a case the acidified sandy residue may be first extracted with warm alcohol, the alcoholic solution filtered through asbestos, evaporated, and the residue extracted as already described with the mixture of ether and petroleum-ether.—*The Analyst.*

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent*

**Hard Rubber Cement.** W. F.—Vulcanite and hard rubber articles of a similar composition are cemented best by applying a hot melted mixture of gutta percha and genuine asphaltum. When applied hot to the joint and the latter closed immediately with pressure this mixture is said to form a good union. A solution of shellac in ammonia water is also said to be of value. The shellac is dissolved in ten times its weight of water of ammonia, and the transparent mass thus obtained (which becomes liquid after the lapse of a few weeks) is applied without additional preparation. When applied it will be found to soften the rubber, but when the ammonia is evaporated it forms a kind of hard coat, and causes it to become impervious to gases as well as liquids.

**Fluid Extract Llarita.** W. G. B.—An inquiry directed to any of the better known firms of manufacturing pharmacists will bring you the needed information. Try Parke, Davis & Co., Detroit, Mich.

**Artificial Essence of Strawberry.** B. A. B.—Artificial fruit essences are made by combining certain ethers in varying proportions. Strawberry is usually made by combining butyric ether and acetic ether, each 5 parts; amyl acetic ether, 3 parts; amyl butyric ether and glycerin, each 2 parts; formic ether, nitrous ether, and methyl salicylic ether, each 1 part.

**Lettuce Cream.**—A. H. F. writes: "I send by mail a sample of 'Lettuce Cream,' which is evidently very different from some of the 'mucilages' sold under various names as 'creams.' It certainly contains an oil. Can you give the formula?"

Lettuce Cream appears to be a compound of mucilage of chondrus with petrolatum and lanoline perfumed with oil of neroli containing a trace of bergamot, and the whole preserved with about one per cent. of boric acid. The words "Lettuce Cream" are the trademarked property of the makers.

**Registration in New York.**—Constant reader writes: "Please inform me if a clerk holding a Jersey State license can register in New York State without examination?"

The law states that "any person, in order to be registered, shall be either a graduate in pharmacy or a licentiate in pharmacy, or a graduate having a diploma from some legally constituted medical college or society."

Licentiates of pharmacy are defined as "persons who have had at least four years' experience in stores where prescriptions of medical practitioners are compounded \*\*\* or such foreign pharmacists as shall present satisfactory credentials or certificates of their competency and qualifications." The law does not define what the "satisfactory credentials or certificates" of competency shall consist of, but we think it likely that the certificate of the New Jersey Board would be accepted as satisfactory.

**Dorvault's "L'Officine."** W. T.—Your informant is in error; two revised editions of Dorvault's "L'Officine" have appeared since the date mentioned. The new (18th) edition was published in Paris in December, 1893, and it can be obtained through any medical bookseller. Address your other inquiry to J. H. Vail & Co., Eighth street, New York.

**Grease Paints.**—E. D. W. writes: "Will you please publish a formula for the preparation of grease paints used for theatrical purposes?"

The general principle of making such preparation consists, as noted in the "Scientific American Encyclopedia of Receipts," in mixing the dry powder with some fat, such as petroleum or lard, or some bland oil (as almond oil), in the proportions necessary to produce the required consistency. Hager and Torjesen give the following formulæ:

### WHITE I.

Zinc oxide.....	1 ounce
Bismuth subnitrate.....	1 ounce
Aluminum plumbate.....	1 ounce
Oil of peppermint.....	12 minims
Camphor.....	12 grains
Ess. bouquet.....	1 drachm
Almond oil, about 6 drachms, enough to make a paste of suitable consistency.	

### WHITE II.

Talc, in fine powder.....	300 Gm.
Bismuth oxychloride.....	50 Gm.
Carmine.....	0.5 Gm.
Oil of bergamot.....	10 drops
Oil of neroli.....	2 drops

### BRIGHT RED.

Zinc oxide.....	12 1/2 drams
Bismuth subnitrate.....	12 1/2 drams
Aluminum plumbate.....	12 1/2 drams
Resin.....	1/4 grains
Ess. bouquet.....	1 drachm
Oil of peppermint.....	12 minims
Camphor.....	12 grains
Almond oil, enough to make a paste.	

Dissolve the resin in the ess. bouquet and add the remaining ingredients in the order given.

### DEEP BORDEAUX RED.

Zinc oxide.....	12 1/2 drams
Bismuth subnitrate.....	12 1/2 drams
Aluminum plumbate.....	12 1/2 drams
Oil of peppermint.....	12 minims
Camphor.....	12 grains
Carmine (dissolved in 80 minims of solution of ammonia).....	30 grains
Almond oil, a sufficiency.	
Ess. bouquet.....	1 1/2 drachms

### RED.

Powdered talc.....	100 Gm.
Carmine.....	2.5 Gm.
Water of ammonia.....	20 Gm.

Digest the carmine in the water of ammonia until dissolved. Mix the solution with a portion of the powdered talc, and this with the remainder, and dry by exposure to the air.

### SKIN COLOR.

Vermilion.....	3 drams
Tincture of saffron.....	3 drams
Powdered orris.....	5 drams
Precipitated chalk.....	20 drams
Oxide of zinc.....	50 drams
Camphor.....	50 grains
Oil of peppermint.....	20 minims
Ess. bouquet.....	1 1/2 drachms
Almond oil, a sufficiency.	

Mix.

### BLACK I.

Drop black.....	2 drams
Almond oil.....	2 drachms
Coco nut oil.....	6 drachms

Mix, perfume and cut into sticks.

### BLACK II.

Best lampblack.....	1 Gm.
Cacao butter.....	6 Gm.
Oil neroli.....	5 drops

Melt the cacao butter, add the lampblack, and while cooling make an intimate mixture, adding the perfume toward the last.

**Test for Arseniates.** P. T.—Lothians' method will be found most expeditious and especially applicable to insoluble arseniates, e.g., Fe<sub>2</sub>AsO<sub>4</sub>. The substance is dissolved in dilute HCl, or if soluble acidulated with dilute HCl, Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> added, the solution warmed, and H<sub>2</sub>S gas passed in. Yellow arsenious sulphide is at once precipitated. The sulphur thrown out from the Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> does not interfere with the reaction, and may be removed by agitation with carbon bisulphide.

**Etching on Glass.** M. W. J.—Hydrofluoric acid or some preparation of it is most commonly employed for etching on glass. A satisfactory solution may be made by mixing sulphate of barium and fluoride of ammonium in the proportion of three parts of the former to one part of the latter, with sufficient sulphuric acid to decompose the ammonium and bring the mixture to the consistency of rich milk. The mixture should be made in a receptacle of lead and kept in a bottle of the same material or gutta-percha.

## Correspondence.

### The New York League.

**Editor AMERICAN DRUGGIST:**

The next regular meeting of the New York City branch of the Interstate Retail Druggists' League will be held at their rooms, Mott Memorial Hall, on Friday, April 6, at 8 P.M. It is urgently requested that every member especially will be present. All retail druggists are invited.

Important subjects, such as legislation in regard to the opium law, the excise law, the law requiring a permit to keep combustibles, and others will be up for discussion. The sale of medicines, especially in large cities, should be restricted to druggists, and I have no doubt that if a bill covering the subject were introduced in the legislature and indorsed by the druggists of all the large cities it could be passed.

If the druggists of this city want the sale of medicines taken from the department stores they should send their petitions with as many signatures as possible to the secretary immediately. This is important, as we want the names of 80 per cent. of the druggists of this city to send to the manufacturers, in order that they may be requested to perform their duties according to the plan formulated at Detroit. If we do not do our part no further progress can be made in accomplishing the objects of the League plan. Under this plan the department stores can have their wings clipped; otherwise they will continue to do us the greatest injury by their unscrupulous methods of business. Send in the petitions now to T. O. Morrison, secretary, 262 Eighth avenue.

CHAS. A. OSMUN, President.

New York, March 27, 1894.

### The New License Bill.

**Editor AMERICAN DRUGGIST:**

The change seems to be from \$20 for a license to sell only upon a prescription to \$50 for license to sell in practically unlimited quantities, without restraint.

It certainly seems broad and liberal enough in its provisions, and the license fee small enough for those of whose business liquor selling is an important factor, but (as a matter of opinion) I could never see why such cases should require special legislation. The proposed amendment seems to make no provision for the druggist whose sales of liquor are only upon prescription or in very limited quantities

for medicinal use. There are many such pharmacists whose business will not warrant a \$50 license fee, because liquor sales being thus restricted are very small. Thus there are and ever will be two sides to the question. W. H. ROGERS.

MIDDLETOWN, N. Y.

### Galen, Jr. On His Cough Mixture.

Editor AMERICAN DRUGGIST:

I am surprised that the formula for syrup wild cherry comp. which I gave through your columns, some time since should have called for so much difference of opinion. It is amusing to me to see members of a learned and honorable profession rushing into print to correct what was evidently a slip of the pen on the part of the editor in saying less than  $\frac{1}{4}$  gr. acetate morphine to each drachm in place of slightly more. I was not aware of the terrible mistake you had made. Mr. Editor, and therefore did not see the awful consequences which might arise should it have gone unnoticed! I had about decided not to say anything in this matter, being satisfied that other members of our profession would advise you very fully in regard to your error. But as acetate of morphine is very powerful, and as  $\frac{1}{4}$  gr. would prove a very potent factor in the case, I must beg you to be more careful next time or you might mislead somebody some time.

I am afraid, Mr. Editor, that you are in the same boat with myself on account of this slip of the pen. Some years ago I had a prescription presented to be filled which called for a very small dose of pepsin in solution. In filling it I was undetermined whether the physician meant a 2 oz. or 4 oz. mixture, and as the dose was small and the patient an adult I filled it 2 oz. The doctor was very indignant. I explained the error to him, but he was implacable; finally, when he saw how worried I was about it he from the bottom of his great, big, magnanimous heart said, "Well, if you are very careful in the future you may live it down." There are a good many very exact people in the world. There were at that time, and some recent communications to your journal incline me to believe that they are not all dead yet. I am very sorry that you made the slip of the pen you did, but can only offer you the consolation the doctor did me. I had prepared a long article demonstrating beyond any peradventure the absolute amount of morphine (alkaloid) in each drachm of this formula. But owing to lack of time to revise same and get it ready for publication I will have to ask you to kindly wait. I know your readers are waiting with some anxiety for more light on the subject and will be greatly disappointed in the matter. I am sorry, but can't help. I am determined that the right must prevail, but only rush forward now to raise my voice in the interest of exactness. I know, Mr. Editor, you appreciate my interest in this matter. When I gave the formula I thought that as each pint of syrup contained 3 grains acetate morphine therefore that each drachm contained  $\frac{3}{16}$  grain of morphine acetate. It was on this basis I had figured the dose as from 1 to 2 teaspoonsful. But since my attention has been called to the difference in size of teaspoons I have again taken the matter under consideration and shall at some future time seek to enlighten you further on this very important subject, as I know the pharmaceutical profession are deeply interested in the matter.

Until then, I am,

Yours,

GALEN, JR.

### The Apothecaries' Guild.

Boston's interest in the Interstate League does not flag. On the contrary, it is constantly gaining, as was shown by the general interest in the meeting of the Apothecaries' Guild held on March 22 at Garfield Hall.

President Stiles, who presided, delivered a lengthy address, in which he reviewed the history of the present movement toward reorganization and gave a sketch of the present condition of that movement.

The address was accepted, placed on file, and ordered to be printed. Copies are to be sent to members of the Guild and to officers of all State associations.

President Canning of the Interstate League was then called upon and spoke of the gains now being made in the western part of Massachusetts and of the financial encouragement rendered since the Guild's last meeting by Worcester, Rhode Island, and Norwich, Conn., becoming paid-in branches of the League. He commended heartily the activity now being displayed in New York City, and especially the work of the volunteer organizers of that locality. The assurances of the president of the New York association that the required 80 per cent. of the retail trade would soon be obtained was also encouraging.

President Canning further said in some sections the plan is not well understood, but greater intelligence results in increased membership. This movement must be national in character, but we must proceed cautiously. Local organizations away from trade centers must not forget that other sections are depending on them for aid. Each center must be in touch with its neighbor. Become identified with the national body; the mistake of the West was in not doing this. We may well be proud of our work of the last year. A large share of the funds was well expended for furthering organization elsewhere. The membership costs only \$1 per man. Is it not well worth the effort? If success crowns our movement. There will be a considerable increase of profit to each member."

Mr. Canning then referred to the new movement known as the Universal Trade Association, and the effort which is now being made to place its shares in the West. This association is said to have been organized under the laws of Virginia. There are 2,000 shares at \$5 each, and it is expected that retailers will buy them.

"One of these shares costs five times as much as a year's membership in the League," said the speaker. "Their scheme is to have a set of patented labels, which are to be issued to manufacturers of patents, to establish identity and genuineness of goods, and the profits, if there are any, will come from sales of labels to users. Proprietors who enter into this plan are expected to guarantee to unload 'cutters,' and jobbers are also expected to assist in this work. Absolute tracing of goods is claimed, but let us see about that! With what favor will manufacturers look upon a movement to label all goods uniformly? Will anyone who gives this question a thought say that proprietors will hand over their business to a trade label syndicate? Manufacturers prefer to give their goods a semblance of individuality, and they will never accept in a body uniform labels. Any plan of marking, to be a success, must be secret; it must not be known to everyone. Slight mutilation, with lower prices for goods, does not hurt sales from the cutter's standpoint; the public will buy these goods, even if the packages are not in a perfect condition, and

as these labels are to be numbered by a numbering machine it is only necessary for one so disposed to erase the figures, and so destroy the means of tracing any package. These objections were all made known to the manager of the plan a year ago, and he has failed as yet to remedy these faults. I consider it an absolute impossibility to trace goods by this method."

Treasurer Cobb then submitted his report, and received the dues of those present for the ensuing year.

President Cobb of the New England Retail Druggists' Union then sketched the objects of that organization and told of the detailed workings by which this movement is to be spread. He said it was a plan approved by all, and referred to the encouraging attendance of retailers at the meeting when the body was instigated. President Cobb made it plain to his hearers that he was in this movement to make more money, and that he could not submit to "cutting." Organization is hard work, but it pays; the bringing of retailers together is followed by increased encouragement. The plan of the Union will cause more associations to be formed, and divide the responsibility. It will take a few dollars now, but success means hundreds of dollars of increased profits in the future. The outlook is now bright, but if we put our shoulders to the wheel it will soon be brighter. Worcester County has the banner organization. Some of the small towns suffer from cutters. Amherst, for instance, has a cutting grocer, who is supplied by Boston jobbers.

President Cobb then spoke of a Massachusetts manufacturer who refused to sell a cutter, and duplicated the refusal even when full prices were offered, and added "I wish jobbers would use a like amount of care in selling to cutters."

The question of a schedule of prices was then brought up, and Mr. Cobb stated that a minimum price at which goods can be sold is to be adopted in his district (East Boston), on April 1, and the petition asking for it has been signed by nearly all the dealers in that section.

Secretary Reeves said upon this subject "I find that opinions vary greatly upon this question of prices, and it is one in which all dealers take great interest." Retailers say to me "When the members of the Guild are ready to talk prices we want to be at the meeting."

State Executive Durkee followed, and suggested considering the question of prices for prescriptions and drugs, and argued effectually upon the necessity of this step. This question was further discussed by Messrs. Canning, Flynn, Garcelon, Griffin, Tucker and others, and was subsequently referred to a future meeting for consideration.

Read the "trade notes" and the market review every week if you want to keep posted.

### St. Lawrence County Druggists Organize.

An organization known as the St. Lawrence County Druggists' Association was formed at a meeting of the retail pharmacists of Ogdensburg on March 8. The object of the organization is stated to be the advancement of the interests of pharmacy and for social intercourse among its members. At each meeting there will be discussions on technical and scientific subjects and ideas will be advanced on the leading questions in pharmacy at the time. The next meeting will be held at Potsdam.

Officers were elected as follows: President, H. B. Thatcher; vice-presidents, S. W. Payne, H. M. Davidson; secretary-treasurer, C. F. Williams; executive committee, A. J. Sears, Fred. Lavack, Carl Greeley, J. Hazelton, John A. Haig. Among the founders of the new association are Wm. W. G. Peck, George Wilmarth, Postdam; S. W. Payne, Gouverneur; Dr. C. W. Baily, Rensselaer Falls; C. E. Williams, A. J. Sears, F. H. Markham, Fred. Ives, H. M. Davidson, Ogdensburg; Charles V. Clark, Adams.

Read the "trade notes" and the market review every week if you want to keep posted.

### Sing Sing Pharmacists Rest on Sunday.

"The Sing Sing pharmacist is unique in that he subordinates pecuniary emolument to personal comfort." So runs a tale in the *New York Herald*.

The druggists of Sing Sing unanimously concur in the opinion that six days in the week are enough in which to do all that they have to do, as the Biblical injunction prescribes, and some time ago all agreed to lock their doors on Sunday. This is what gave rise to the *Herald* article.

The citizens became so indignant, however, that a compromise was effected, and now each opens one Sunday in rotation. Huge placards have been printed directing the patron to the drug store where he can be accommodated. For instance, in every pharmacy window to-day was seen the placard giving the name of the druggist whose store was kept open.

### New York.

The scores in the games bowled on last Saturday, in the Wholesale Drug Trade Bowling Association, were as follows:

FIRST GAME.																			
SEABURY & JOHNSON.					C. G. BACON & CO.														
S. S. B. Score.					S. S. B. Score.														
Seabury	...	1	8	88	Bacon	...	2	0	8										
Dakin	...	1	8	108	Davis	...	1	3	6										
Benjamin	...	3	4	8	104	McKenzie	...	1	8										
De Zeller	...	1	8	6	118	Boer	...	0	3										
Tremper	...	8	1	6	160	Paul	...	1	2										
Totals					...	9	10	81	641	Totals					...	5	9	86	546

#### FRAMES.

Seabury & J.	68	113	165	228	279	350	405	507	579	641
C. G. B. & Co.	44	98	164	225	279	341	389	440	495	546
Umpire—W. W. Tammen.	Score—T. M. Mannion									
and G. S. Marlager.	Average—Seabury & Johnson,									
128 1-5 ; C. G. Bacon & Co.,	109 1-5.									

#### SECOND GAME.

PARK, DAVIS & CO.			C. G. BACON & CO.										
S. S. B. Score.			S. S. B. Score										
Ahearn ....	2	3	144	Bacon ....	1	0	9	77					
Marlager ..	2	3	4	160	Davis .....	2	0	8	106				
Jenkins....	5	3	2	202	McKenzie ..	1	2	7	111				
Thornton ..	0	0	10	91	Boer .....	2	1	7	130				
Carr .....	1	5	4	143	Paul .....	1	0	9	91				
Total .....				11	14	26	739	Totals .....		7	3	40	505

The record down to date, including the result of the above games, is as follows:

	Played.	Won.	Lost.	To Play.
Whitall, Tatum & Co.	3	3	0	2
Parke, Davis & Co.	5	4	1	0
Seabury & Johnson	4	1	3	1
McKesson & Robbins	4	2	2	1
Dodge & Olcott	3	2	1	2
C. G. Bacon & Co.	5	0	5	0

On March 31 the Dodge & Olcott team will bowl against Whitall, Tatum & Co. and Seabury & Johnson, the final game on April 1 being between Whitall, Tatum & Co. and McKesson & Robbins.

An interesting variation to the programme of the alumni lecture at the college delivered by Prof. Rusby was introduced by John Clay, manager of the New York house of Parke, Davis & Co. The lecturer stated that he was told by some sorters engaged in picking over *Carthagens ipecac*, that they were preparing for

the American market, while some men engaged in preparing *Rhaponticum rhabarb* said the same thing. In the discussion which followed the lecture Mr. Clay stated that the statements made by these packers were incorrect. That years of experience in the crude drug warehouses of London, and later as one of the largest importers and purchasers of crude drugs in New York City, enabled him to say positively that neither *Rhaponticum rhabarb* nor *Carthagens ipecac* ever obtained admission to this country save possibly as cabinet specimens. He made this statement, he said, so as to prevent the students from thinking that this country was made a dumping ground for poor quality drugs. Prof. Rusby then said that he had merely repeated what the packers had said to him. Subsequently at a class lecture on gum arabic, Prof. Rusby paid a very high compliment to Mr. Clay's knowledge of crude drugs by saying that he would rather have had Mr. Clay deliver the lecture on gums, as he had himself learned a great deal on this subject from that gentleman.

Ed. Wells, of Crittenton's, latest story is on Herbert Harding, manager of the Humphrey Homoeopathic Co., who has become very enthusiastic over the virtues of the last addition to their list of specifics, No. 77; a cure for grip. This enthusiasm it seems Mr. Harding was unable to suppress even on Sunday, and so he remarked to Mrs. Harding while churchward bound on Palm Sunday, "My dear, do you know that No. 77 is a really wonderful remedy." (a remark that to her lacked the charm of novelty), "and I wish the clergyman would mention that number this morning. In fact I would be willing to donate \$20 to any charity you may name if he should mention it." They were scarcely seated in their pew before the clergyman arose and invited the congregation to "join in singing that old familiar hymn number 77." "Herbert, I'll name the charity," whispered Mrs. Harding. And it proved a good omen for 150 gross of No. 77 have been sold in about six weeks.

F. W. Koch, editor of *Notes on New Remedies*, has just read the final proofs of the "Report on the Progress of Pharmacy" which he has prepared for "Treat's Medical Annual." Mr. Koch having been requested to take up this work which was formerly done by the late Prof. Bedford. Having taken up the work rather late in the year Mr. Koch says that he has not been able to prepare it in precisely the way he would have preferred. As it is the report is both interesting and instructive and will prove an interesting feature of the work.

The New York City branch of the Interstate Retail Druggists' League will discuss many matters of interest at its meeting on Friday (30th inst.) at Mott Memorial Hall, 64 Madison avenue. Among the topics for discussion will be proposed legislation affecting pharmacy, including the Nixon bill, which is given elsewhere in this issue. Every pharmacist is invited to be present whether a member of the league or not.

Thos. P. Cooke is and will be in a state of discomfort for the next week or so, as the carpenters have taken possession of the office of the New York Quinine and Chemical Co., at 114 William street. When they have finished, however, things will be in a better condition there than they ever have been, and Mr. Cooke will have an elegant place in which to receive the trade.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

FOURTH PRIZE.—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

16. What is meant by electro negative and electro positive elements? Give examples of each.

17. What is meant by stable and what by unstable equilibrium?

18. What is the difference between specific gravity and specific volume, and how are they determined?

19. What is the difference between a solid, a liquid, and a gas?

20. What is Boyle's law?

21. Explain the difference between galvanic, static and dynamic electricity.

22. State the difference between a Bunsen cell, a Grove's cell, and a Leclanche cell.

23. What is an induced current?

24. Explain the construction of a Ruhmkorff's coil and its use in the medical battery.

25. What is electrolysis and how is it applied in analysis?

26. What is calomel, how is it made and what impurities are most apt to be present?

27. Give the botanical origin, habitat and medicinal properties of senega and state which commercial variety is the best.

28. Explain the result which will follow when acid spirit of nitrous ether is combined in a prescription with fluid extract of uva ursi.

29. What is Stoke's liniment?

30. What is guaiacol obtained from and what tests should it respond to?

### Michigan Mention.

Bert Vandenbergh, the Alma druggist, has moved into new quarters across the street from his former location.

C. B. Fuqua of the City Drug Store, Bay City, has sold his stock to George W. Wilner, who will consolidate it with his own.

Carl Hensel, clerk in Thum's drug store, Grand Rapids, died last week from the effects of poison, supposed to have been self-administered.

F. J. Hunt, with Farrand, Williams & Clark, Detroit, suffered the loss of \$235 worth of diamonds last week by thieves who broke into his residence at night.



Burglars last week broke into the drug store of Henry Haigh, Detroit, and stole a quantity of perfumery, cigars, etc.

Conrad Brothers' drug store at Otsego was broken into last week and goods of considerable value stolen. The thieves overlooked an unlocked safe with \$250 in it.

Stevens & Todd, proprietors of the Central Drug Store, Detroit, are attracting large crowds to their store by an elegant window display of Dabrooks' Easter perfumes.

C. W. Hull, druggist at Bay City, who recently gave a chattel mortgage on his stock to Williams, Davis, Brooks & Co. of Detroit, has retired. Huyck & Ritchie are his successors.

Orr & Temple of Tecumseh have opened again. Since the fire Mr. Orr has formed a partnership with F. J. Temple, a druggist of Ridgeway. The fixtures and stock are new.

Muir & Co. of Grand Rapids have bought the stock of D. C. Scribner & Sons. Mr. Scribner will locate at some point in Utah, where he will engage in the real estate business.

S. T. Haan has purchased the interest of A. Stonehouse, in the drug business of Haan & Stonehouse and will conduct the business alone. Mr. Stonehouse has gone into the firm of Muir & Co.

The Hupp & Pierce Pharmaceutical Company has filed articles of incorporation at Detroit. The capital stock is \$20,000 paid in. The incorporators are Charles Hupp, Marcomus L. Pierce and George C. Hupp.

Mrs. Rose Meier, wife of Henry Meier, chief chemist in a college and laboratory at San Francisco, died last week at her home in Clio, Mich. He was formerly with Parke, Davis & Co. of Detroit.

Madison V. Wilson, a Sand Lake druggist, charged by the State Board of Pharmacy with allowing an unregistered clerk to put up prescriptions, plead not guilty recently, and a hearing was set for last week.

The store occupied by the Oakes Manufacturing Co., 72 and 74 Pearl street, was the scene of a fire on the night of February 27. Owing to the nature of the stock the loss will be but \$1,500 to \$2,000. The office furniture was badly damaged by water.

### Random Notes.

Bernard Gilpin of Gilpin, Langdon & Co., Baltimore, is now enjoying the tropical climate of Florida.

We learn that Wm. J. Hoagland, the popular druggist of Hazleton, Pa., is building a large residence in a very pleasant location in that city.

Jos. M. O'Malley, 951 Main street, Newport, Ky., has secured the contract to furnish oils to the Newport and Covington Electric Street Car Company.

W. Lloyd Williams, chemist and assistant manager of Burroughs, Wellcome & Co.'s works in England, has been elected a Fellow of the London Chemical Society.

Dr. J. C. Means, widely known as one of the active workers on the Mississippi board of pharmacy, has opened a new and handsome pharmacy in his native city of Natchez.

Wm. R. Warner, head of the well-known firm of manufacturing pharmacists. Wm. R. Warner & Co., has sailed in the Hamburg steamer Columbia for an extended European tour.

E. H. Davis, of the wholesale drug firm of E. H. Davis & Co., Rochester, expects to leave soon for a trip through the South. He will tarry for a short time at Fortress Monroe.

W. F. Dowe of Pearl street and Broadway, Cincinnati, O., has moved his family to Fort Thomas for the summer. Mr. Dowe is one of the few druggists making money during these dull times and he reports business increasing.

The old drug stand, corner Magazine and Josephine streets, New Orleans, is now occupied by J. S. J. Otto, formerly of Phillip street. Mr. Otto is careful and painstaking in his attention to business, and will no doubt be very successful in his new venture.

Henry S. Wellcome (of Burroughs, Wellcome & Co.) is presenting to the Senate of the United States the portrait of Pocahontas which hung in the library of the Woman's Building during the Columbian Exposition. This portrait of Pocahontas was painted from life after she was converted to Christianity and became Mrs. Rolfe.

Joseph Brown of the firm of Rousseau & Brown, Woonsocket, R. I., is an enthusiastic devotee of the game of checkers as it is played scientifically. Until about a year ago Mr. Brown conducted a checker "column" in the Woonsocket Reporter, which is considered the official column of the checker players of the United States, but was compelled to give it up on account of pressure of business.

W. F. Schultz of Schultz & Knoll, 8th and Main streets, Covington, Ky., tells a novel story on his friend, Mr. Buck, who gave up his position in Cincinnati because the proprietor of the drug store insisted on his mixing two gallons of paint for a customer on Sunday, causing Buck to spoil his Sunday clothes. Drug clerks generally glory in Mr. Buck's grit, and he has of course secured a more lucrative position. Cleanliness is the motto of Schultz & Knoll, and they have the prettiest store in Covington and a good business.

## Boards and Colleges.

THE MICHIGAN BOARD has granted certificates to the following from southwestern Michigan: Full certificates—J. Ball, Nashville. Assistants—Carlton Bechtel, Wayland; B. C. Fisher, Edwardsburg; L. O. Loveland, Charlotte; E. S. Nivison, Mendon; J. W. Smith, Benton Harbor; S. Swartout, Marshall; J. H. Bruce, Benton Harbor. The board meets at Star Island, June 25.

THE ATLANTA COLLEGE OF PHARMACY held its annual commencement on Tuesday, March the 6th, at the Grand Opera House. There were three graduates—O. B. Hartzog, South Carolina, A. R. Moody, Anniston, Alabama, and R. C. Hood, Harmony Grove, Ga. The Opera House was crowded, about 2,000 people being in the audience. Col. N. J. Hammond, president of the board of trustees, delivered the diplomas. Dr. Geo. F. Payne, dean of the college, writes that "every indication points to full classes next year, a large number having already promised attendance. The college has now a splendidly equipped chemical laboratory and also a well furnished dispensary. The second-year students during the next session will have unusual advantages in preparing the many prescriptions written at the clinics of the Atlanta Medical College by the most eminent physicians and surgeons of the State."

KANSAS STATE BOARD OF PHARMACY.—The first quarterly meeting of the Kansas Board of Pharmacy was held at Fort Scott on March 7. Thirty-five applicants appeared before the board, of which number the following passed a satisfactory examination and were granted certificates:

REGISTERED PHARMACISTS: Thos. Bailey, Independence; F. W. Butler, Yates Center; J. N. Beasley, Carbondale; L. Colvin, Wichita; A. L. Dyer, Wichita; E. J. Fish, Sedan; H. A. Harmon, Phillipsburg; D. B. Hickey, Chanute; Leon Johnson, Summerfield; W. C. Laughlin, Hanover; C. L. McAdams, Wichita; J. E. Maxwell, Oswego; H. M. Ochiltree, Haddam; W. B. Roche, Geneseo; G. W. Rice, Ashland; Ross A. Smith, Hill City; R. S. Treat, Hutchinson; E. B. Vanness, Mound City.

ASSISTANTS: C. C. Moore, Galena; G. L. Blatchley, Ft. Scott; Ed. W. Brewer, Peabody; E. A. Landwehamp, Leavenworth; P. Orlopp, Atchison; D. Phillips, Concordia; W. D. Benham, Pleasanton; J. L. Carter, Emporia.

The next meeting will be held at Hutchinson, June 6, at 9 A.M., for one day only. Applications should be filed with the secretary at least five days before date of meeting. For other information address H. W. Mehl, Secretary, Leavenworth, Kan.

NEW YORK STATE BOARD.—At the last examination the following candidates passed successful examinations:

### LICENSED PHARMACISTS.

Lewis M. Donaldson, Gilbertsville; Herman Grundhoeffer, Albany; John B. Dixon, Almond; Earle Roosa, Hornellsville; C. Clifford Livingston, Fishkill-on-Hudson; Daniel R. Spratt, Tuxedo Park; Arthur E. Russ, Syracuse; Lemuel B. Magill, Lansingburgh; George McIntyre, Troy; John S. Milerick, Albany; Woodbury B. Adams, East Bloomfield; George C. Rogers, Rochester; Harry J. Steinlein, Rochester; Charles T. Wolff, New York; William H. Clinton, Jr., Peekskill; Howard F. Cant, White Plains; Won S. Crandall, Hornellsville; Richard S. Kellar, Syracuse; Charles E. Hamner, Watkins; Emile A. Sarot, Sag Harbor; Ira Ulman, New York; George C. Schlegel, Poughkeepsie; Adolph Katzman, New York; Randolph R. Reed, Margaretville; Maurice W. Bowman, Dolgeville; Melvin E. Bellinger, Cobleskill; Theodore J. Bradley, Albany; Frederick T. Lape, Athens; Will E. Martin, Canandaigua; Harry B. Mason, North Granville, Jurian Miller, Albany; John Leo Muldowney, Albany; Charles H. Reese, Amsterdam; William K. Reid, Amsterdam; Robert A. Sloss, Albany; Floyd C. Thompson, Albany; William Tompkins, Middleburgh; Paul L. Whitmarsh, Albany; Ulrich Wiesendanger, Albany; John E. Corbett, Whitehall; J. Hunting Cobb, M.D., Binghamton; Jacob Selicowich, New York; Harry Arnold, Gowanda; Clifford H. Calkins, Corning; Archie I. Drake, M.D., Buffalo; Jasper A. Lawton, Syracuse; Claude D. McAbon, Buffalo; Guy L. McCutcheon, Buffalo; John V. Murphy, Lincoln Park; Lorenzo G. Nail, Buffalo; William A. Ostrander, Buffalo; Ernest R. L. Smith, Buffalo; George H. Tozier, Brockport.

### ASSISTANT PHARMACISTS.

Fred Kenyon, Albany; Wm. H. Blauvelt, Tarrytown; Gordon MacGillivray, New York; Ray G. Lawrence, Yonkers; Wm. W. Herrick, Saratoga; David R. Dorn, Esperance; Louis P. Hall, Red Creek; Burt L. Shaw, Waterford; John Quec, Brooklyn.

The dates for the next meeting and examination have not been decided upon.

## Obituary.

Thomas B. Aitchison, one of the best known drug dealers in Rutland, Vermont, died February 23, from pneumonia after five days' illness. He was born in Madrid, N. Y., June 29, 1835.

Samuel Kidder, aged 72, died recently at his residence, No. 55 Nesmith street, Lowell. He was formerly in the drug business on Merrimac street in that city. Later he was in the flour business, from which he retired several years ago. He leaves five daughters. His death was caused by heart disease. Mr. Kidder was a member of the Old Residents' Association, and was vice-president of the Lowell Institution for Savings and a director of the Wamesit National Bank.

## Trade Notes.

Druggists will be interested in the plan adopted by A. M. Clark, 186 Liberty street, New York, for introducing his "Clark's Capillusia" for the hair. Particulars will be furnished on request to A. M. Clark, 186 Liberty street, New York.

Fred. N. Burt, Buffalo, N. Y., has issued a specimen book of druggists' labels and general engraving which will be of value to druggists as a guide in the selection of labels, stationery, etc. Requests for specimen books should be addressed to Fredrick N. Burt, Buffalo, N. Y.

Aimless wishing is a kind of psychological Niagara. Its force, if rightly directed, might lift the world of action to great and complete deeds. The wish is the vital impulse of all enforced activity. Activity itself is merely the seeking to express this wish wholly and perfectly.

The C. C. White Toilet Paper Co., importers and manufacturers of paper, 164 Duane street, New York, is a good firm to order Japanese napkins from. They also sell every variety of druggists' wrapping paper. Druggists will consult their own interests by writing for prices and samples.

The E. S. Burnham Co. have an interesting announcement in this issue with reference to Burnham's Clam Bouillon. A free sample of this delicious nutrient beverage can be obtained by any reader of this journal who makes application to the E. S. Burnham Co., 120 Gansevoort street, New York.

"Webb's Alcohol" is advertised as "the acknowledged standard." It is one of the most reliable brands of alcohol offered to the trade and is employed in preference to any other by careful pharmacists. Particulars regarding prices on quantity lots can be obtained from James A. Webb & Son, 65 Pearl street, New York.

Druggists who are thinking of adding to their stock of soda fountain glassware should write to Henry Allen for a copy of his catalogue and price list of soda water requisites. He also makes a specialty of graduated glass measures and fine prescription ware. Henry Allen, 188 William street, New York, is how he should be addressed.

There is a popular demand for a simple but trustworthy remedy for the ailments of children during the teething period. To meet this demand druggists should stock "The Children's Comfort," a truly excellent preparation which can be dispensed as asked for in the original containers. Descriptive circulars of this preparation can be had of the sole proprietor, Geo. E. Fairbank, druggist, 10 Front street, Worcester, Mass.

There is something very attractive about the style of package adopted for "Fehr's Compound Talcum Powder." This old standard preparation has been before the medical and pharmaceutical professions since 1873, and has won its way steadily into favor. Sample boxes of this well-named "hygienic dermal powder" for infants and adults can be obtained by writing to the maker, Julius Fehr, M.D., Hoboken, N. J.

H. Planten & Son, New York, are introducing a capsule patterned after a suppository design brought out by Henry S. Wellcome at the Chicago meeting of the A. P. A. The new capsule is intended for the administration of remedies per rectum and is referred to as the "Improved (Wellcome shape) Rectum Capsule." Particulars, prices and samples

can be obtained from H. Planten & Son, North William street, New York.

A. H. Preston, Portsmouth, N. H., puts up a line of sachet powders that are unequalled for delicacy of odor, neatness of package, and general beauty of appearance. The Rivermouth Sachettes, as they are named, combine all the excellent characteristics of the high-priced French sachets with the beauties of the best American, and are sold to the retailer at a figure that permits of a satisfactory profit. It will be to your advantage to write Preston for samples and prices.

Among the reputable firms of wholesale druggists who occupy space in the advertising pages of this journal C. G. Bacon & Co., 20 College place, New York, occupy a prominent place. This well-known house are successors to the old established firm of Frazer & Lee. Any of our readers who may have thoughts of opening up a new account will make no error in communicating with C. G. Bacon & Co., as their standing and reputation in the wholesale drug trade is of the best.

"Ross' Kraft Bier" is a new dietetic stimulant which is attracting the attention of physicians. It has been found of high worth in cases of enfeebled digestion and is deemed especially useful as an aid in the treatment of phthisis. It is being introduced to the medical profession of the United States by A. Vischer & Co., 7 Warren street, New York, who are sole agents for the United States. Those who desire to try the new product should write for samples and particulars to A. Vischer & Co. at the address given. Samples, etc., will be furnished free if this paper is mentioned at the time of writing.

Hind's honey and almond cream, like many other articles of acknowledged merit, has been widely imitated, but with poor success, if we are to judge by the remarkable sales which have attended the genuine article. In addition to the intrinsic merit of the article, it is a specialty which pays a good profit, and may be handled to advantage by every druggist. Those who have not stocked it heretofore would do well to order a supply, in order that customers demanding the preparation may not be disappointed. For free sample write to A. S. Hinds, sole proprietor, Portland, Me.

Inquiries innumerable are received in the course of a year with reference to desirable makes of tablet machines. One of the most compact, simple and easily adjusted of these machines is the "Shoemaker." This machine is made in different styles to suit the requirements of the trade, size "B," which weighs about 275 pounds, being intended for the manufacture of tablets by hand power. Particulars regarding steam power and other makes of the machine are given in a catalogue and price list which will be forwarded free of cost to any reader of this journal who cares to make application, addressing Robert Shoemaker, Jr., 215 Race street, Philadelphia, Pa.

There is really more profit to be made from buying Seidlitz powders in bulk than most druggists are willing to admit. Take the bulk Seidlitz powders as advertised to the retail trade by Charles R. Doane, 23 Meserole street, Brooklyn, N. Y. for example. These are preparations of standard quality put up by the Doane Seidlitz Powder Machine. They are accurate in weight, and the established reputation of Mr. Doane is a good guaranty as to their purity. Those of our readers who have never used the Doane Seidlitz Powders should write for prices and samples. The

lowness of the former and the neatness of the latter are sure to prove a pleasant surprise. Address Chas. R. Doane, 22 Meserole street, Brooklyn, N. Y.

The perfume novelties of the Crown Perfumery Co. which are advertised in this issue are among the most salable and seasonable of all the goods brought to the attention of druggists at this season. Easter and its attendant gayeties conduce to an increased sale of perfumes and perfume novelties. Druggists should complete their preparations while there is yet time. The Crown Perfumery Company have signified their willingness to forward a copy of their new illustrated catalogue containing beautiful lithographs showing the different styles of package adopted for the Crown perfumes, Crown soaps, etc., to any druggist who mentions this paper in making application.

The old-established and reputable house of Burroughs, Wellcome & Co., Snow Hill, London, have a card in this issue which contains the names of a few preparations which have attained a fame that is world-wide. These are the "Kepler" preparations of malt and cod liver oil. "Tabloids" are a form of tablet triturates which are largely used in the London hospitals and elsewhere. Hazeline Cream is a preparation for the toilet for which special excellence is claimed. The American depot of Burroughs, Wellcome & Co. is at 82 and 84 Fulton street, New York, where supplies of these articles can be had when not obtainable from wholesale druggists. Interesting literature on the Kepler preparations can be obtained from the New York depot upon application.

The Arnold Steam Sterilizer as used in the pathological laboratories of the chief teaching institutions of the United States where bacteriology is taught is an article which druggists would do well to stock more freely. Physicians are coming to use the Arnold Steam Sterilizer more and more as an aid in the preventive treatment of many infantile disorders, ordering it used for the sterilization of milk foods, and commending it as the most practical and convenient instrument for that purpose. The sterilizer is handled very generally by druggists because it gives best satisfaction to customers and is profitable to sell. We would urge our readers to write to Wilmot Castle & Co., Rochester, N. Y., for particulars, price lists, catalogues, etc., which will be sent readily if this paper is mentioned at the time of writing.

The high value of the Mellor & Rittenhouse Co.'s licorice as an advertising medium was put to a practical test in New York City quite recently by a prominent pharmacist. He filled one of his show windows with samples of the licorice in its different forms—lozenges, pipes, etc., and marked the selling price where it could be easily seen. In three days his stock of licorice was exhausted and his week's business demonstrated the fact that the number of people who visited his store during the time of the display was a little more than double the usual number. The "M. & R." licorice is worthy of all the good things that have been said concerning it, a fact which is amply demonstrated in the award of the jurors of the Columbian Exposition, who placed "M. & R." licorice first on the list for the highest award. A card to Mellor & Rittenhouse will bring a descriptive circular giving prices, style of package and particulars of the different varieties manufactured. The Mellor & Rittenhouse Company may be addressed simply Philadelphia, Pa.

## Review of the Wholesale Market.

NEW YORK, March 28, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The week under review has been a quiet one in the market for drugs, dyestuffs and chemicals, the volume of business having shrunk a few degrees below the normal—this is with reference to the receipt of jobbing orders, no marked quietude being observable in the distribution of original package lots. At present values in the general market appear firm in tone, and where changes have occurred in most instances they have been for the better. The indications for the spring trade are regarded as favorable, though a good deal of reserve is yet noticeable and credited to the uncertainty of financial and tariff legislation at Washington. As to values there appears a generally steady feeling, and prices are as a rule well sustained. Cod-liver oil has advanced materially. Higher values are placed on caffeine and benzoic acid. California mustard seed is firmer and advancing. Celery seed has advanced. Alum is doing better and may advance. The important changes are tabled below as follows:

ADVANCED.	DECLINED.
Alum.	
Benzoic acid, German.	Canary seed.
Caffeine.	Opium.
Celery seed.	
Cod-liver oil.	
Mustard seed, California.	
Nitrate of soda.	
Quicksilver.	

### DRUGS.

ALCOHOL is maintained steadily by the Trust managers, the competition from outside sources being given little or no consideration. The range is steady at \$2.24 @ \$2.28 for grain, with conditional rebates for 10 bbl. lots; 70c. for 95 per cent. wood, 75c. for 97 per cent. with a discount of 2½ per cent. on 5 bbls. or more when taken in one lot.

BALSAM COPAIBA is a little irregular at the moment, buyers and sellers being somewhat apart in their views; prices are without quotable change.

BALSAM FIR, Canada, is maintained at \$3.65 @ \$3.75, though few sales are reported, and important inquiry is yet lacking.

BALSAM PERU is held with increasing firmness; for goods of prime quality \$1.60 is now generally required.

CASCARA SAGRADA is moderately active in a jobbing way, and prices are well sustained at the previous range. Other lines are quiet at nominally unchanged prices.

BENZOIC ACID, German, is scarce, and the price has been advanced to 51 @ 53c.

CAFFEINE is advancing into stronger position, the available supply being small and closely concentrated, with \$2.35 quoted as firm inside.

CANTHARIDES have shown no special action of late, but the market is steady and firm at the quoted range.

CANNABIS INDICA has been inquired for to some extent, and we hear of sales aggregating 500 lbs. at 9 @ 10c.

CACAO BUTTER remains quiet though firm upon the basis of 32 @ 32½c. spot and 3¼c. to arrive.

COD LIVER OIL, Norwegian, continues to manifest an upward tendency, and the situation is strong both here and at primary sources. There is a fair amount of specu-

lative inquiry at present, but holders decline to consider large orders. For the limited amount which they are willing to dispose of \$32 is generally asked. The quoted range is \$30 @ \$32, with some sellers asking as high as \$36. A further material advance is not unlikely, as the present statistical position of the oil resembles closely that of the year 1883, when prices rose as high as \$100 @ \$110. The same conditions that prevailed then prevail now, and it is within the range of probability that prices will materially advance from the present values.

COLOCYNTH, Trieste, meets with a continued moderate inquiry, and we hear of several jobbing sales at 36c. We quote the range at 33 @ 36c.

COCAINE MURIATE continues to meet with a fair demand and is maintained firmly at the previous range. The stock of crude is well controlled by manufacturers.

CUBEB BERRIES continue slow of sale though holders are not urging their goods at any concession from 16 @ 18c. for XX and 14 @ 15c. for ordinary.

CUTTLE FISH BONE remains quiet though the market appears steady upon the basis of 10c. for Trieste.

ERGOT, Spanish, is cabled firmer from London, though the position of the market here is unchanged. We quote German at 25 @ 27½c. and Spanish at 28 @ 32c.

JUNIPER BERRIES are finding sale in small quantities at 2½ @ 3c.

LYCOPodium is generally held at 51 @ 56c. as to marks and quantity, with a moderate jobbing demand.

MANNA has met with about the usual jobbing inquiry, and we hear of numerous small sales at the current range. Small flake is quoted at 28 @ 30c.

NAPHTHALINE BALLS are jobbing moderately and the market is easy at 3½c. for goods ex-wharf and 4c. for store.

OPUM has offered more freely during the week, but this and the recent price concession have not materially affected the sale and the market retains a generally dull and easy appearance. The amount of stock held by dealers here is said to be large and many are reported anxious to realize. The large holders are disposed to take a firm stand and maintain prices, but others are inclined to urge sales, and as a consequence prices have materially declined. Single cases can be obtained in instances at \$2.67½, with the range up to \$2.70. Broken lots are in moderate request with \$2.75 @ \$2.77½ quoted regular. Powdered is lower with the range at \$3.50 @ \$3.60.

QUININE has moved out with considerable freedom during the week, and the market has continued firm. Foreign in bulk from second hands may yet be obtained at the range of 23½ @ 24½c. as to brand and quantity. The direct representatives of foreign manufacturers refuse to shade full 25c. The price of domestic remains 27½c.

SENNA, Tinnivelly, appears to be gradually advancing in the London market, and the tone of the situation here is stronger in consequence; but values are unchanged, the quotations remaining 6 @ 18c.

SOAP, Conti's white, is without important change. Proposed changes in the tariff have had the effect of directing increased attention to the article, and a fair distribution is now in progress. The current sales are at 9½c.

QUICKSILVER is well sustained at the advance. Small sales are making at 47 @ 48c.

TARTARIC ACID is without important change; numerous small sales at 22c.

VANILLA BEANS are meeting with considerable inquiry and there is a good

movement. The range of the market is \$6.50 @ \$13 for whole and \$5.50 for cut. A scarcity is reported in this season's crop.

### DYESTUFFS.

CUTCH is firm and in fair demand; the current sales of prime goods in bales are at 5½ @ 6c.

DIVI DIVI has been in better demand of late. Sales at \$55 @ \$56.

GAMBIER remains very quiet without, however, any quotable change in price. Store goods are quoted 4¼ @ 4½c. as to quantity; steamer stock on the wharf at 4½c. and ex-Wandering Jew at 4¾ @ 4½c.; ex-sail shipments from Singapore are offered at 4.15c.

MADDER, Dutch, is seldom inquired for. Casks quoted at 10 @ 11c.

NUTGALLS, blue Aleppo, continues in fair inquiry with sales reported of 50 bags within the range of 13¼ @ 14¼c.

SUMAC, Sicily, is in moderate jobbing request and steady at the previous range of \$72.50 @ \$77.50.

### CHEMICALS.

ALUM has advanced in the interval and is held steady at \$1.75 @ \$1.85 for lump and ground respectively.

ARSENIC, white, is in demand, but owing to scarcity is offered sparingly; 3¼c. is the lowest open figure named.

BLEACHING POWDER continues in moderate request and the market is steady on the basis of 2¼c. for German and 2¼ @ 2½c. for English.

BLUE VITRIOL continues in demand and the market is well sustained at the range of 3½ @ 3¾c.

CHLORATE OF POTASH, powdered, is somewhat scarce; there is a fair inquiry and business is of fair average volume at the range of 14½ @ 14¾c. English crystals are held at 14½c. and German 14¼c.

CITRIC ACID continues dull, with barrels quoted 42½c. and kegs 42½ @ 43c.

CREAM TARTAR remains quiet but steady, with numerous sales at 17½c.

CAUSTIC SODA does not improve in demand; small sales at \$2.50 @ \$2.65 for 70 and 74 per cent. as to test and quantity.

NITRATE OF SODA is well sustained at the advance to \$2.12½ @ \$2.15, and current sales to consumers and the trade are within this range. The statistical position is favorable, and a further appreciation is looked for.

OXALIC ACID continues held at the previous range of 6½ @ 7c., and a fair business is doing.

### ESSENTIAL OILS AND GUMS.

ANISE, though slightly firmer, has not varied in value during the week; the demand is of the average value. We quote the range at \$1.42½ @ \$1.45.

BERGAMOT is well sustained at the quoted range, but only small transactions are reported.

CASSIA is firmer in consequence of better foreign advices, but nominally unchanged at 85 @ 90c.

CLOVE continues to offer at 50 @ 53c. as to quantity and holder, but the demand momentarily is light.

CUBEB continues without change of note; small sales are making within the range of \$1.50 @ \$1.70.

LEMON is fairly well sustained at the quoted range, though we learn of no important transactions.

PEPPERMINT continues dull, though prices are without quotable change. Bulk is held at \$2.30 @ \$2.50 as to quality, and HGH at \$2.77½ @ \$2.85.

SASSAFRAS continues quiet. There is the usual jobbing distribution at 36 @ 40c.

WINTERGREEN is held at \$1.40 @ \$1.50.

## GUMS.

ALOES are quiet and unchanged in value, with no special interest shown.

ARABIC is in moderate demand at previous prices; sorts are held at 10 @ 11c.

ASAFOETIDA is jobbing fairly at the range of 15 @ 30c. as to quality and quantity.

BENZON is meeting with moderate inquiry at the quoted range of 27 @ 40c. for Sumatra.

CAMPOR is dull at 42 @ 43c. for domestic and 41½c. for Japanese.

CHICLE continues to offer at the range of 25 @ 27c., though we learn of no important transactions.

SHELLAC continues held in firm position, and a steady moderate demand is noticed daily. There is a scarcity of marks, TN being about the only description in supply. DC held at 34c., VSO 33c., TN 26 @ 27c., and garnet 25c.

TRAGACANTH, Aleppo, is quiet at the range of 32 @ 56c. as to quality.

## ROOTS.

ACONITE is meeting with about the usual jobbing inquiry, and sales are making at 11½ @ 12c.

BELLADONNA, German, is in moderate demand at the quoted range of 9 @ 12c. as to quality and quantity.

DANDELION, German, is steady at 7½ @ 8c. with jobbing sales within this range.

GINSENG is without change of note either as regards price or demand. We quote the range at \$2.50 @ \$3.

GINGER, Jamaica, unbleached, continues held at the range of 11 @ 14c. as to quality with a moderate distribution at these figures.

GOLDEN SEAL continues in request and the market is firm at 22½ @ 23c.

IPECAC continues held at \$1.27½ @ \$1.40, though no sales of consequence are reported.

JALAP is firm at 24 @ 26c., and within the range a moderate jobbing trade is reported. The quality of the crop this season is said to be unusually good.

MANDRAKE is quiet, though nominally unchanged at 3½c. @ 4c.

SARSAPARILLA, Mexican, continues in moderate demand, with the sales making at the range of 9 @ 9½c.

SENEGA appears to attract increased attention and is in demand for consumption. Quotations are steady at 39 @ 40c.

## SEEDS.

ANISE is strengthening. German has advanced to 8c. and Italian is held at 9½ @ 10c. for sifted. There are rumors of a scarcity at primary sources.

CANARY, Smyrna, is showing a slightly easier tone with spot goods offered down to 2½c. There is, however, very little inquiry.

CARAWAY continues in request and the market is firm at 6¼ @ 7c.

CLEERY is now under good control and prices have been marked up a point. From the hands of the principal holders the price has advanced to 18 @ 19c., but from outside hands 17c. can be done in a limited way.

CORIANDER is inquired for, but holders are offering very sparingly at 6½c.

HEMP, Russian, is dull though we learn of nothing offering below 2¼c.

MUSTARD, California, is in improved position and firm upon the basis of 3¾c. for yellow and 3¾c. for brown.

QUINCE, German, is firmer in consequence of advice from abroad indicating a cost to import of fully 35c. In this market 35 @ 40c. is asked.

## City Notes.

George Jarchow has purchased the store of Frank Gundlach at Second avenue and Forty-eighth street.

It is rumored that Jno. K. Brater is about to open a new store at the corner of Park avenue and 76th street.

Mr. McKnight and young Mr. Williams of H. W. Williams & Co., Fort Worth, Tex., who had been spending some time in the New York markets, just reached home last week in time to see their store burned down.

Sharp & Dohme's business continues to grow so rapidly that they have found it necessary to enlarge the space devoted to their business offices, taking for this purpose some of the space formerly devoted to storing jobbing stock.

S. H. Carragan, who is well known to the drug trade of New York, has recently had assigned to him the duty of visiting the jobbing trade of Baltimore, Philadelphia, Washington, Pittsburgh and Harrisburg in addition to the eastern towns which he covers for Parke, Davis & Co.

Clarence Smith, the handsome junior partner of C. B. Smith & Co. of Newark is getting to be one of the most familiar figures in the wholesale drug trade section. He does the buying for his firm and is busy in the market every day in his indefatigable search for that elusive quantity the "inside quotation."

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

## POSITIONS WANTED.

DRUGGIST.—A man; registered in Connecticut as first clerk or manager; good references. Address "Rhei," this office.

POSITION WANTED.—Young man, 28, single, licensed pharmacist by examination, ten years' experience, wants position "on the road" or behind the counter; attracts and holds custom; best references. Address, stating salary, "P. D. R.," P. O. Box 35, Rome, Ga.

SITUATION WANTED.—By drug clerk of 3½ years' experience; have passed the junior examinations at the O. C. P., Toronto; age 24; thoroughly practical; good references; salary moderate. Address O. O. Hammill, Sheffield, Ontario, Canada.—13.

GRADUATE N. Y. C. P. seeks position by May 1; has had 6 years' best city experience and speaks German and English; would like to arrange to take summer course in botany. Salary \$16. Address "Iodo Thy-mol," care of this office.

ANY DRUGGIST in need of a thoroughly competent and sober clerk, a graduate P. C. P., unmarried; long experience in city and country, please address "Senna," care this office.—14.

DRUG CLERK, age 25, American, six years' experience, desires permanent position; reference, present employers. Address "Drugs," Box 424, Haverstraw, N. Y.—14.

YOUNG MAN, 20, desires position in wholesale drug house, any department; graduate N. Y. C. P.; three years' retail experience; willing to work; references; salary no object. W. S., Box 8, Belleville, N. J.



A dietetic stimulant of the highest nutritive value, prescribed by the most eminent Physicians both here and abroad, and used with great benefit in Phthisis, Neurasthenia, Dyspepsia, Anaemia, and in all cases of enfeebled Digestion.

Samples, etc., furnished on application. Correspondence solicited.

**A. VISCHER & CO., Sole Agents,**

7 Warren Street,

NEW YORK.

P. O. Box 754.

*Kindly mention this Journal when writing to Advertisers.*

WANTED.—Advertising matter of any kind; circulars, papers, bills, almanacs, samples of merchandise to distribute from house to house, tack up signs, lettering fences, buildings, bridges, rocks, etc.; do any advertising you want in Mercer County; specialty made of Shenango and Mahoning valleys, the very beehive of industry; we make affidavit of work performed; give bond and references, when required; send samples explaining nature of work required; how much you have, for price and terms. Distributing and Mailing Agency, Sharon, Mercer Co., Pa.

WANTED.—A thoroughly competent druggist seeks a position as clerk or manager of a pharmacy; 13 years' experience; speak, read and write German as well as English; A No. 1 reference, and plenty of it; Ohio preferred. Address E. W. SPANNAGEL, 495 S. Washington avenue, Columbus, Ohio.

PHARMACIST of 5 years' experience in drug business, attended one course lectures Phila. College Pharmacy, and two courses medical lectures, desires position; best of reference. Address B. A. L., care this office.—13.

## BUSINESS OPPORTUNITIES.

AN EXCEPTIONAL OPPORTUNITY.—Prominent corner store on Fulton street, Brooklyn, occupied as a drug store for about fifteen years, will be vacated on May 1. Reasonable rent and lease. For further particulars address "Landlord," care this office.—13.

BACK NUMBERS wanted of AMERICAN DRUGGIST, Vol. 18, No. 9, and PHARMACEUTICAL RECORD, Vol. 10, No. 7. Address, stating price, "Record," 37 College place, New York.

FOR SALE.—A fine drug store, in the best town in eastern Penn.; population about 10,000; rich country all around; no cutting; store elegantly stocked and equipped; owner leaving the State; unless you mean business do not answer. Address "Chemist," care this office.—12.

WHY NOT OWN RESPECTABLE and lucrative business in a large city and employ salesmen for surrounding towns; we will give exclusive territory for a quick selling business specialty to men of ability and small capital; the goods are necessary, and the periodical supplies yield permanent and profitable returns. Address "Profitable," care this office.—14.

FOR SALE.—A bargain; elegant twelve syrup soda apparatus, four draits, complete with everything necessary; chance of a lifetime; will sell for one-half value; terms to suit. Address, with stamp, E. E. Howard, agent, 82 Prince street, New Haven, Conn.—13.

A SINGLE MAN with twelve or fifteen hundred dollars as partner to increase stock. Address Box H, Bolton, Miss.—13.

DRUG CLERKS' EXAMINATIONS made easy—600 questions in chemistry, pharmacy, materia medica, etc., \$2. By J. Heron, Pharmaceutical Instructor, 321 West 17th street.

Rivermouth  
Sachettes

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Sure  
Sellers.

Write to Preston,  
Portsmouth, N.  
H., and find out  
about them.

ROSS'  
KRAFT BIER.

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

Acetanilid, bulk, per lb.	.35	●	.36%
" lbs... per lb.	...	●	.58
" ozs... per oz.	...	●	.58%
Acetate of lime:			
Brown, per 100 lb....	.90	●	.95
Gray, per lb.....	.0036	●	.007%
Acids:			
Acetic Com'l, pr lb..	.0196	●	.00
Aquaforin, 36 deg....	.0934	●	.03%
" 40 .....	.0934	●	.04%
Benzoic, German.....	.51	●	.53
" English.....	.09	●	.09%
Boric, Whole.....	1.26	●	1.26%
" Powdered.....	.13	●	.13%
Citric, American.....	.46%	●	.43
" English.....	.43	●	...
Carbolic Crystals....			
bulk.....	.1336	●	.16
lb. bottle.....	.19	●	.21
Muriatic, 160ss deg....	.90	●	1.37%
Nitric, 36 degrees.....	.0934	●	.04%
" 40 .....	.04	●	.04%
Oxalic, English.....	.0746	●	.07%
" German.....	.07	●	.07%
Picric.....	.33	●	.30
Salicylic.....	1.12	●	1.20
Sulphuric.....	...	●	1.25
Tartaric, Crystals....	.20	●	...
" Powdered.....	.20%	●	...
Tannic.....	1.05	●	1.00
Alcohol, Grain, per gal.	2.24	●	2.28
(Less rebate.)			
Wood, 95° 97%.....	.70	●	.75
Alcohols.....	...	●	1.35
Alolin, per lb.....	1.00	●	1.10
Atom, Lump, per 100 lb.	...	●	1.75
Ground, per 100 lb....	...	●	1.80
Antifebrine per oz....	.19	●	.20
Antipyrene, per oz....	1.20	●	1.40
Arrow root, Berm., lb.	.24	●	.25
St Vincent, in bbl., lb.	.11	●	...
Arsenic:			
Red Saxon, lb.....	.06	●	.06%
White.....	.0934	●	.09%
Balsam, Copaiba, lb....	.34	●	.30
Fir, Canada, gal.....	3.63	●	3.75
Fir, Oregon, gal.....	.80	●	.85
Peru, lb.....	1.60	●	...
Tolu, lb.....	.24	●	.27
Bark, Buckthorn, per lb.	.0634	●	.08
Cacora Sagrada, lb....	.0434	●	.05%
Gum, lb.....	1.94	●	.18
Orange peel.....	.06	●	.07
Sassafras, per lb....	.0634	●	.07
Soap, lb.....	.0734	●	.04
Bicarb. Soda, Engl., lb.	.0734	●	.03%
domatic, lb.....	3.00	●	3.15
Bichromate, Pot'h, lb.	.10%	●	.11
Bismuth, Sub. Nit.,			
per lb., bulk.....	1.95	●	2.00
Bismuth, Sub. Carb.,			
per lb., bulk.....	2.25	●	2.30
Black'g Powd., per lb.	.00	●	.00%
Blue Vitriol, lb.....	.0734	●	.08%
Borax, refined, lb.....	.0834	●	.08%
Concentrated, lb....	.0734	●	.07%
Brimstone, best ad., ton	19.50	●	20.00
Bromide Potash De-			
mestic, w'k't, lb.....	.37	●	.38
bottle, lb.....	.45	●	.46
Bromide Ammonium,			
bulk.....	.45	●	.46
Bromide Sodium, w'k't.	.48	●	.43
Bromine, bulk.....	.43	●	.43
Burgundy pitch, per lb.	.0034	●	.00%
Cacao Butter:			
12-lb. boxes, lb.....	.32	●	.33%
Dutch A., per lb.....	.33	●	.34
Caffeine.....	2.33	●	2.50
Campher, ref'd, bbls, lb	.48	●	.43
cases, lb.....	.43	●	.44
Cantharides Chinese, lb.	.28	●	.30
Russian, lb.....	.05	●	.77%
Carb. Ammonia.			
cases, lb.....	.08	●	.08%
Cassia Buda, lb.....	.18	●	.18%
Castor Oil, cases, lb....	.75	●	.75%
Barrels, lb.....	1.46%	●	.15
Caustic Soda, as to test			
Chalk, Engl. Precip.,			
bulk, lb.....	.04	●	.06
Chloral Hydrate Cry-			
stals, bulk, per lb....	1.20	●	1.25
Hydrate crusts, bulk,			
per lb.....	1.05	●	1.20
Elixirate Pot. Cry., lb.	.84%	●	1.14%
Pow'd, lb.....	.15	●	.15%
Chloform, Bulk, lb....	.50	●	.55
Cinchonidine Sulphate			
of, German, etc.....	.02	●	.00%
Citrates U.S.P Iron, lb.	...	●	.59
Soluble.....	...	●	.59
Iron and Ammonia, lb.	...	●	.50
Iron and quinine.....	1.50	●	1.55
Iron and strychnine...	2.00	●	2.05
Phosphate U. S. P., lb.	...	●	.57
Pyrophos. U. S. P., lb.	...	●	.85
Pyrophos, Soluble, lb.	...	●	.85

Citrates, Potash, per lb.	...	0	.49
Soda, per lb.	...	0	.49
Cobalt, pow'd, lb.	...	.20	.25
Cocaine Murate, per oz.	3.95	6	15
Cocaine, bulk, oz.	4.25	6	45
Cocaine, eight.	4.65	0	...
Cod Liver Oil, Nor-			
wegian, bbls.	30.00	0	.30
Newfoundland	.65	0	.70
Celocynth:			
Trieste, lb.	.33	0	.36
Spanish, lb.	.19	0	.24
Copperas, per 100 lb.	.50	0	.80
Cr. Tartar, Crystals, lb	.1750	0	...
Powdered, lb.	.1750	0	.18
Cubeb Berries XX, lb.	.14	0	.18
Ordinary, lb.	.14	0	.15
Cutch, bales, SM, lb.	.0534	0	.06
Cutch, boxes lb.	.0834	0	.09
Cuttle, Trieste, lb	.09	0	.10 1/2
Jewellers' lb.	.35	0	...
Dextrine, lb.	.0450	0	.05
Divi Divi, per ton.	55.00	0	65.00
Dragon's B'd, lump, lb	...	0	...
In recds, lb.	.45	0	.50
Epsom Salts, per 100 lb.	1.00	0	1.20
Ergot:			
G'm'n and Russ's, lb	.25	0	.27 1/2
Spanish, lb.	.28	0	.32
Ergotine, Domestic.	...	0	4.00
German.	4.00	0	...
Flowers:			
Arnica Flowers, per lb	.20	0	.11
Chamomile.			
German, New, lb.	.17	0	.24
Roman, New.	.10	0	.18
Lavender, Ordinary,			
per lb.	.04	0	.20
Select, per lb.	.15	0	.65
Gambier, lb.	.0040	0	.05
Glycerin, bbls, lb.	.11	0	.18 1/2
" cases, lb.	.13	0	.14
Guaiacs, Paradise, lb.	.06 1/2	0	...
Guarana, lb.	.90	0	1.00
Gums:			
Aloes, Cape, lb.	.05	0	.05 1/2
" Curacao, lb.	.03	0	.04 1/2
" Costarine, lb.	.18	0	.30
Arabic 1st picked.	.38	0	.43
" ad	.25	0	.28
Arabic, sorts.	.10	0	.12 1/2
Asafoetida, lb.	.20	0	.30
Benzoin, lb.	.27	0	.40
Chicle, lb.	.26	0	.27
Gamboge, lb.	.53	0	.54
Guaiac, lb.	.17	0	.22
Kino, lb.	1.00	0	.22
Mastic, lb.	.27	0	.70
Myrrh, lb.	.20	0	.38
Sassafras, lb.	.29	0	.30
Senegal, picked, lb.	.18	0	.45
" sorts, lb.	.09	0	.09 1/2
Shellac, DC, lb.	...	0	.35
" VSO, lb.	.30	0	.33
" Diam'd I lb	.30 1/2	0	.34
" SS, lb.	.20	0	...
" TN, lb.	.25 1/2	0	.27
" Garnet.	...	0	.25
" Blacked, lb	.30	0	.35
Tragacanth, Aleppo, lb.	.30	0	.56
" Turkey.	.48	0	.75
Indigo, lb.	.45	0	1.65
Insect Flowers.	.14	0	.25
Insect Powder, pure, lb.	.10	0	.28
Iodide Potash, bulk, lb.	.275	0	2.80
" bot's, lb.	.203	0	2.60
Isinglass, Am'n's, lb.	.4750	0	.60
Japan, lb.	.35	0	...
Juniper Berries, lb.	.0004	0	.03
Leaves:			
Belladonna, per lb.	.0094	0	.11
Buchu, short, lb.	.10	0	.18
" long, lb.	.28	0	.25
Coca, prime, lb.	.15	0	.30
Damiana, lb.	.11	0	.12 1/2
Hycosamus.	.08	0	.10
Jaborandi, lb.	.25	0	.35
Rose, red, lb.	.53	0	.54
Senna Alex natrl, lb.	.18	0	.25
Senna Tinney, lb.	.05	0	.12
Stramonium, lb.	.03 1/2	0	.28
Licorice, M. & R., lb.	.17	0	.19
Lupulin, German.	.45	0	1.75
Lycopodium, lb.	.28	0	.56
Manna, large flake, lb.	.20	0	.23
Small flake, lb.	.28	0	.30
Menthol, Japanese.	5.00	0	6.00
Mercurials:			
Blue Pill, lb.	.31	0	.30
Calemel, lb.	.60	0	...
Cor. Sublimata, lb.	.55	0	.57
Mercury and Chalk.	.20	0	...
Ointment, lb.	.20	0	.37
Red Precipitate, lb.	.78	0	...
White " lb.	.83	0	...
Morphine, bulk, oz.	2.20	0	3.50
Eight, oz.	2.35	0	3.50
Moss, Irish, lb.	.06	0	.06 1/2
Irish, bleached, lb.	.13	0	.15
Muriate Potash, per 100			
lb.	1.50	0	1.50

Naphthaline, flake, per lb.....	.03	0	.03%
Naphthaline, Ball, per lb.....	..	0	..
Nitrate Silver, oz.....	.48	0	.43%
Nitrate Soda, 100 lb.....	2.12 1/2	0	2.15
Nux Vomica, lb.....	.03 1/2	0	.04
Nutgalls, China, per lb.....	.13	0	.13%
Aleppo, per lb.....	.13 1/2	0	.14%
Oils, Essential:			
Anise.....	1.45 1/2	0	1.45
Almonds, Bitter.....	4.50	0	7.50
" Sweet.....	.20	0	.40
Bay, per lb.....	3.50	0	4.00
Bergamot.....	1.75	0	2.25
Cajeput, Native.....	.35	0	.45
Campher.....	.07	0	.08
Cassia.....	.85	0	.90
Citronella, Native.....	.07	0	.05
Clove.....	.50	0	.53
Copaiba.....	.70	0	.80
Croton.....	.00	0	1.00
Cubeb.....	1.50	0	1.70
Geranium.....	4.50	0	7.90
Lavender.....	.40	0	2.25
" Garden.....	.40	0	.90
Lemon, as to brand.....	1.30	0	1.65
Lemongrass.....	.80	0	.85
Musk, per lb.....	7.00	0	8.00
Myrrh.....	.17	0	.19%
Neroli.....	.25.00	0	35.00
Nutmeg.....	1.80	0	2.75
Orange, sweet.....	1.35	0	1.50
Orange, bitter.....	3.25	0	4.00
Origanum.....	.84	0	..
Peppermint.....	.90	0	1.00
Peppermint, bulk.....	2.30	0	2.50
" HGH.....	2.77 1/2	0	2.85
Rose.....	7.50	0	9.00
Sandalwood.....	..	0	2.85
Sassafras.....	.36	0	.40
Sassafras, Artificial.....	..	0	.25
Spearmin.....	1.60	0	1.80
Tansy.....	2.00	0	3.00
Wintergreen.....	1.40	0	1.50
" Artificial.....	.80	0	.87%
Wormwood.....	2.15	0	2.25
Opium, Natural, ca. per lb.....	2.67 1/2	0	2.70
Opium, Ordinary:			
Jobbing, per lb.....	2.75	0	2.77%
Opium, Rwd., per lb.....	3.50	0	3.60
Phenacetine, per oz.....	.85	0	1.00
Purshana Potash, Yellow, per lb.....	.24 1/2	0	.25
Road, per lb.....	.42	0	.43
Quichuava, flaska, per lb.....	.47	0	.48
Quinine:			
Domestic, bulk, oz.....	..	0	.27%
Domestic, ess.....	.30	0	.35
German, bulk.....	.93 1/2	0	.94%
German, ess.....	.27 1/2	0	.29
Roots, Aconite, lb.....	.21 1/2	0	.12
Althea, cut, lb.....	.12	0	.12
Alknet, lb.....	.06 1/2	0	.07
Arisea, lb.....	.12	0	.13
Beladonna Ger., lb.....	.09	0	.12
Blood, lb.....	.05	0	.06
Calama, lb.....	.07 1/2	0	.08
Calama, blanc'd, lb.....	.20	0	.24
Calchicum, per lb.....	.14	0	.18
Colemba, lb.....	.05 1/2	0	.11
Dandelion, Germ. lb.....	.07 1/2	0	.08
Dogwood, lb.....	.08	0	.10
Galangal, lb.....	.03 1/2	0	.04
Gentian, lb.....	.03 1/2	0	.04
Ginseng, lb.....	2.50	0	3.50
Ginger, Jamaica, bled, lb.....	.16	0	.18
Ginger, Jamaica, unbled, lb.....	.11	0	.14
Golden Seal, lb.....	.22 1/2	0	.23
Hellebore, powd., lb.....	.07 1/2	0	.08
Ipecac, lb.....	1.27 1/2	0	1.40
Jalap, lb.....	.04	0	.06
Kava Kava, lb.....	.20	0	.25
Licorice, select, lb.....	..	0	.15
" Pow'd, lb.....	.17	0	.18
Lovage, lb.....	.30	0	.35
Mandrake, lb.....	.03 1/2	0	.04
Orris, Florentine, lb.....	.20	0	.30
Orris, Verona.....	.10	0	.22
Pink, lb.....	.24	0	.30
Rhubarb, whole, lb.....	.25	0	.26
Sarsaparilla, Head lb.....	.28	0	.42
Sarsaparilla, Mex. lb.....	.20	0	.20%
Sassa, lb.....	.30	0	.40
Serpentaria, lb.....	.30	0	.35
Valerian, Belgian, lb.....	.07	0	.07%
" German, lb.....	.10	0	.22
Saffron, Amn., lb.....	.42	0	.44</

Seeds, Anise, German lb.	.06	0	.08%
Anise, Star, lb.	.19	0	.20
Canary, Smyrna, lb.	.005%	0	.00%
Canary, Sicily, lb.	...	0	.03
Caraway, lb.	.06%	0	.07
Cardamom, lb.	...	0	...
Aleppy, per lb.	.65	0	.80
Cardamom, Malabar, per lb.	.65	0	1.45
Celery, lb.	.18	0	.19
Colchicum, lb.	.12%	0	.13
Coriander, lb.	.006%	0	...
Cummin, lb.	.10	0	.11
Fennel, Germ., lb.	.10%	0	.11
Flax Meal, per lb.	...	0	.08
Foenugreek, lb.	.00%	0	.03
Hemp, Russian, lb.	.00%	0	.03%
Mustard, veg. Cal. lb.	.04	0	.04%
Mustard, brown, Cal. lb.	.03%	0	.04%
Poppy, per lb.	.05%	0	.07
Quince, German, lb.	.35	0	.40
Rape, German, lb.	.03%	0	.03%
Rape, English, lb.	.08%	0	.08%
Soap, Castile, Mara, mottled, pure, lb.	.06	0	.06%
Whites, Conti's, lb.	...	0	.00%
Soda Ash, lb., 45% per 100 lb.	1.20	0	1.25
Squills, white, lb.	.04%	0	.06
Sugar Milk, powd., lb.	.08	0	.10
Sugar Lead, white, lb.	.11	0	.11%
Lead, brown, lb.	.05%	0	.06
Sulphate Ammonia, per 100 lb.	2.90	0	3.00
Do, Potash, 45% per lb.	1.11%	0	1.15
Do., Potash, 90% per lb.	2.20	0	2.15
Sulphur, Roll.	...	0	.01%
" Flour.	...	0	.01%
Spirits Nitre, U. S. F.	.39	0	.40
Spirit Ammonia, Arom.	.44	0	.51
Sulphuric Ether.	.54	0	.61
Sumac, Sicily, ton.	75.00	0	80.00
" Virginia.	47.50	0	49.00
Tar Barbadoes, gal.	...	0	.45
Tin Crystals, bbls., per lb.	.13%	0	...
Jara, per lb.	.75%	0	...
Tonka Beans, Para, lb.	.45	0	.60
" Angostura	1.85	0	2.00
Turpentine, Spirits.	.30%	0	.31
Vanilla Beans, lb.	6.50	0	13.00
" cut, lb.	5.00	0	5.50
Venice Turpentine, barrels, lb.	.18	0	.19
Cans, lb.	.18	0	.20
Wax, Brazil, Veg., lb.	.17	0	.22
Japan, lb.	.07%	0	.08
Zinc Oxide.	.30	0	.40

Linseed, raw, gal.....	..	0	..	58
boiled, gal.....	..	0	..	58
Lard, City Prime, present make, gal.....	..	61	..	60
West, prime, gal.....	..	62	..	62
Cotton-seed, Prime, Crude, gal.....	..	0	..	56
Summer Yellow, prime, gal.....	..	32 1/2	..	33
Summer Yellow, off grades.....	..	0	..	39
Prime White, gal.....	..	33	..	34
Sperm, Crude, gal.....	..	63	..	65
Natural Spring gal.....	..	63	..	65
Bleached Spring gal.....	..	68	..	70
Natural Winter, gal.....	..	68	..	70
Bleached Winter, gal.....	..	73	..	75
Whale, Natural Win- ter, gal.....	..	44	..	...
Bleached Winter, gal.....	..	47	..	...
Ex. Bl'ch'd, gal.....	..	49	..	...
Menhaden, Crude, Sound, gal.....	..	39	..	33
Dark, pressed, gal.....	..	34	..	35
Light, pressed, gal.....	..	36	..	38
Bleached, Winter gal.....	..	47	..	48
Extra Bleached, gal.....	..	44	..	...
Tallow, City, prime gal.....	..	0	..	58
Cocconut, Ceylon, lb.....	..	95 1/2	..	95 1/2
Cochin, lb.....	..	0	..	95 1/2
Ced, Domestic, gal.....	..	38	..	40
Foreign, gal.....	..	49	..	45
Red Elaine, gal.....	..	36	..	38
Saponified, lb.....	..	4 1/2	..	...
Beak, gal.....	..	35	..	...
Struts, gal.....	..	36	..	...
Olive oil, table, in time.....	..	30	..	1.85
Com'n, bbls., gal.....	..	58	..	60
Rapeseed.....	..	60	..	65
Norfolk, prime, gal.....	..	60	..	61
Palu. prime Lard, lb.....	..	95 1/2	..	95 1/2



# American Druggist and Pharmaceutical Record.

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### For the Busy Pharmacist

I can cheerfully bear testimony to the uniform excellence of your journal and to its adaptability to the needs of the busy pharmacist in all respects.

C. M. FRISBIE.

BAINBRIDGE, N. Y.

### LEGISLATION IN NEW YORK.

PENDING pharmaceutical legislation formed the topic for discussion at the last meeting of the Erie County

(Buffalo, N.Y.) Pharmaceutical Association. A letter on the subject from CASWELL A. MAYO of New York was read by C. O. RANO, president of the State Pharmaceutical Association, and it was determined to issue a vigorous circular asking pharmacists to send to their representatives in the State legislature protests against the passage of Senate bill No. 709, introduced by Mr. SAXTON; Assembly bill No. 1115, introduced by Mr. DOUGLAS, and Assembly bill No. 1813, introduced by Mr. NIXON.

The latter bill, which was referred to editorially in these columns last week, was introduced at the request of Rev. Mr. ALBERTSON of Jamestown, and from present indications is likely to die in committee. As was pointed out last week this bill offers a dangerously tempting opportunity for unscrupulous persons to engage in the promiscuous sale of liquor under the plea of being pharmacists. In Massachusetts, where a druggist's license costs but one dollar, there has been such flagrant abuse of the privilege, not by pharmacists but by liquor dealers masquerading as pharmacists, as to bring reproach upon all the members of this honorable calling. To obviate this the Massachusetts pharmacists, are making an effort to have very severe penalties inflicted for the abuse of the privilege on the line suggested in our last issue. These penalties would take the shape of a suspension of both the liquor license and the pharmaceutical registration for the first offence and a revocation of both licenses, possibly accompanied by a fine, for a second offense.

Senate bill No. 709 was introduced by Senator SAXTON on request of Mrs. M. S. BURT, president of the Women's Christian Temperance Union, and has the backing of that association. Contrary to a promise made at Syracuse in 1893, Mrs. BURT did not confer with the legislative committee of the New York State Pharmaceutical Association before having it introduced. The essential provisions of the bill were given in our issue of March 22.

Assembly bill No. 115 introduced by Mr. DOUGLAS reads as follows:

SECTION 1. No person, firm or corporation shall, after October first, eighteen hundred and ninety-four, either sell or give away, or cause to be sold or given away, any poison or poisonous substance in liquid

form except in fluted bottles labeled in the manner heretofore provided by the laws of the State. Each person or corporation violating any of the provisions of this act shall be guilty of a misdemeanor.

SEC. 2. This act shall take effect immediately.

While both the SAXTON and the DOUGLAS bills have some good features when considered from a purely theoretical point of view, they are eminently impractical, and any attempt to enforce them would entail a great hardship on the pharmacists of the State without gaining any adequate advantage in the way of additional security to the citizens at large.

THERE has been a delay on the part of the Senate in acting on the Wilson tariff bill which has aroused the almost universal condemnation of the business men of the community regardless of their political affiliations. The business interests of the country have suffered most severely by the delay in settling definitely the policy of the government. The two political parties are so nearly evenly balanced in power in the Senate that individual interests carry more weight than they did in the House of Representatives, and several of the Senators have insisted upon introducing certain changes affecting the interests of their own constituency. Under these conditions there have been a number of changes made in the bill, and it is not yet ready to be reported on by the committee.

The latest reports indicate the probability of an increase in the import duty on alcohol as compared with the rate fixed in the Wilson bill. This is decidedly objectionable as we have before had occasion to point out, as it permits any one obtaining the control of the domestic output to entirely disregard foreign competition in fixing the selling price. The internal revenue tax will also be increased, so it is said, to \$1.10 per proof gallon.

The legislative committee of the Iowa Pharmaceutical Association have issued a circular asking every druggist to write to the Senator from his State protesting against any increase in the tax on alcohol. The committee state that if the bill now pending be passed it will be equivalent to a tax of \$100 on every druggist in the United States.

The advice is good and should at once be acted upon by every druggist.

## Dispensing Percentage Prescriptions.\*

By C. A. MACPHERSON.

Percentage prescriptions may be roughly divided into two classes—(1) those in which  $n$  parts are added to 100 parts, and (2) those in which  $n$  parts are contained in 100 parts. The following are examples of the first class:

## I.

Emp. plumbi.....  $\frac{3}{4}$  i (= 480 grains)  
 Paramn. moll.....  $\frac{3}{4}$  i (= 480 grains)  
 Acid. salicylic..... 2 per cent. (= 19.2 grains)

## II.

Magnes. carb. pond.....  $\frac{3}{4}$  i (= 480 grains)  
 Crete preparat.....  $\frac{3}{4}$  i (= 480 grains)  
 Thymol..... 1 per cent. (= 0.6 grains)  
 Acid. carboic..... 1 per cent. (= 0.6 grains)

Fiat pulv.

In dispensing this the thymol should be mixed with the carbonate of magnesia, and the carboic acid with the chalk, and then all mixed together thoroughly.

## III.

Camphor.....  $\frac{3}{4}$  i (= 60 grains)  
 Chloral.....  $\frac{3}{4}$  i (= 60 grains)  
 Veratrine..... 1 per cent. (= 1.2 grains)

In the foregoing examples the apothecaries' ounce and dram are indicated, and the percentages are accordingly calculated upon their values, but in the following the basis of calculation is different, the avoirdupois ounce being used.

## IV.

Crete precip..... 1 oz. (= 437.5 grains)  
 Camphor..... 10 per cent. (= 43.75 grains)

So far, no difficulty has occurred, but when a prescription like the next one is presented, a doubt arises as to how the percentage is to be calculated.

## V.

Mucilag. amyli.  $\frac{3}{4}$  iv. (= 1,920 minims, or  
 adde 1,750 gr. meas.)  
 Tinct. pii..... 2 per cent. (= 38.4 minims)  
 Plumbi acet..... 1 per cent. (= 17.5 grains)

Where there is no special knowledge of the prescriber's intention, and in the absence of any generally understood rule, the better plan appears to be to follow pharmacopoeial precedent—weigh solids, measure liquids, and calculate parts by weight in like parts by measure.

The first example of the second class is a logically true percentage preparation and presents no difficulty.

## VI.

Acid. salicylic..... 2 per cent.  
 Resorcin..... 5 per cent.  
 Adipis..... ad.  $\frac{3}{4}$  i

Here the proportions are 2, 5, and 98—equivalent to 9.8, 24, and 446.4 grains respectively in the ounce of 480 grains.

In the next set of examples, which contains solids and liquids combined, the same difficulty presents itself as in the last example of the first class, and for several reasons it is expedient to follow the procedure indicated.

## VII.

Sol. hydrarg. bichlor. (1 in 500).....  $\frac{3}{4}$  vi  
 (437.5  $\times$  6) + 500 = 5.25; the number of grains of hydrarg. bichlor. required.

## VIII.

Menthol..... 2 per cent.  
 Ol. eucalypti.....  $\frac{3}{4}$  i  
 Alcohol..... ad.  $\frac{3}{4}$  iss

As  $1\frac{1}{2}$  fluid ounces equal 656.25 grains measure, the quantity of menthol is 13.125 grains.

\* Read at a meeting of the Edinburgh (Scotland) Chemists' Assistants' Association, March 7, 1904.

## IX.

Glycerin. acid. boric. (12 per cent.).....  $\frac{3}{4}$  ii

$$875 \times \frac{12}{100} = 105 \text{ grs. boric acid.}$$

## X.

Make  $\frac{3}{4}$  i. application tannic acid and glycerin 10 per cent.

$$487.5 \times \frac{10}{100} = 48.75 \text{ grs. tannic acid.}$$

## XI.

Ammon. chlor.....  $\frac{3}{4}$  s.  
 Aqua.....  $\frac{3}{4}$  ii

Sig.: A teaspoonful added to half a pint of water = 1 in 800.

Here we have first to ascertain the quantity of ammonium chloride in a teaspoonful of the solution, and from that the amount required for the two ounces (437.5  $\times$  10) + 800 = 5.46875, the number of grains of ammonium chloride in the teaspoonful, which multiplied by 16 gives 89.5 grs. as the total amount required.

In making carboic acid preparations the difficulty arises in using crystallized acid as to whether it should be weighed or melted and measured. The better way seems to be to weigh it and make up to the required measure with the required solvent. The resulting product will be practically identical in strength with one made from the official liquefied acid by measure.

## XII.

Make 2 ounces of a 10 per cent. solution carboic acid in equal parts of water and glycerin.

This can be made by using 87.5 grains of crystallized or 96 minims of liquefied acid, and making up to 2 fluid ounces with a mixture of equal volumes of water and glycerin. In like manner the following may be dispensed:

## XIII.

Loto. carboic. 1 in 40. mitte  $\frac{3}{4}$  vi.

(437.5  $\times$  6) + 40 = 65.625 grains crystallized acid. (480  $\times$  6) + 40 = 72 minims liquefied acid.

But crystallized acid alone should be used for the next one.

## XIV.

Ol. carboic (10 per cent.).....  $\frac{3}{4}$  iii

For this 181.25 grains of acid are required, together with sufficient oil, to make up the measure of 8 fluid ounces.

Another way of ordering the class of preparations now being considered is to prescribe a definite weight of solid in a definite volume of liquid:

## XV.

Make  $\frac{3}{4}$  i sol. atrop.  $\frac{1}{4}$  gr. in every 10 minims.

## XVI.

Sol. atrop. sulph. ( $\frac{1}{4}$ ) et morph. acet ( $\frac{1}{4}$ ) gr.  
 in 5 minims).....  $\frac{3}{4}$  iv

This is the preferable way, and one where there can be no dubiety as to what is meant. As much cannot be said for the following, where, owing to the quantities ordered and the purposes for which they may be required, the doubt may arise whether the percentages should be calculated on grain measures or minims.

## XVII.

Sol. atropin. sulph. ( $\frac{1}{4}$  per cent.).....  $\frac{3}{4}$  ii

## XVIII.

Sol. morph. acet. (4 per cent.).....  $\frac{3}{4}$  iv

## XIX.

Make  $\frac{3}{4}$  i. sol. cocain. hydrochlor. (7  $\frac{1}{2}$  per cent.)

The safer way would seem to be to make these according to the general rule already referred to, and calculate on grain measures, unless the prescription

bears internal evidence that the prescriber intends a definite amount of active ingredient to be administered, as by hypodermic injection, then the percentage should be calculated on minims.

In the following it is difficult to make out what the prescriber's intention is.

## XX.

Acid. boric..... gr. 40  
 Glycerin.....  $\frac{3}{4}$  vi  
 Acid. salicyl.....  $\frac{3}{4}$  per cent.

The simplest way seems to be to measure the glycerin, and on the combined weight of it and the boric acid calculate the required amount of salicylic acid.

In view of the importance of this subject to dispensers and students, as well as to the public, it would be well if some general rule for dispensing percentage prescriptions could be agreed upon, so as to insure uniformity; but better still it would be if practitioners in prescribing were to take care to leave nothing indefinite.

## Dispensing Notes.

By WILLIAM DUNCAN.

## IRON SALTS AND PIMENTO.

The following mixture invariably deepens in color, finally becoming black:

Tinct. ferri. perchlor..... 3 ii  
 Quin. sulph..... grs. xviii  
 Sp. chloroformi.....  $\frac{3}{4}$  i  
 Aq. pimento..... ad.  $\frac{3}{4}$  vi

On adding the iron to the pimento water the mixture assumes a greenish-blue tint, quickly deepening to yellowish-brown, and finally depositing a black insoluble precipitate. This result is a characteristic reaction of all phenols, and is due to the reaction between the ferric chloride and the eugonol of the oil of pimento.

## NITRATE OF SILVER AND COCAINE.

The following prescription has been handed to me for information as to how it should be dispensed:

Argent. nitrat..... grs. x  
 Cocaine..... grs. xii  
 Aquam..... ad.  $\frac{3}{4}$  i

Sig.: The lotion for the throat.

The prescriber is evidently alive to the incompatibility of the alkaloidal hydrochlorate with silver nitrate, and there orders the alkaloid. It is only sparingly soluble, but, nevertheless, sufficiently so to reduce the silver salt. If the alkaloid be carefully neutralized with nitric acid before adding the silver nitrate a perfectly clear and stable solution results.

## Medical Notes.

## AGAINST SCROTAL ECZEMA.

[CAMPELL—Med. Rec.]

## LOTION.

Iodoform..... 3 drams (12 gme.)  
 Zinc oxide.....  $\frac{1}{2}$  oz. (46 " )  
 Spirit camphor..... 3 fl. drs. (11.5 Cc.)  
 Lime water..... of each,  $\frac{1}{2}$  fl. oz. (45 " )  
 Linseed oil.....

Apply at night.

The patient should wear a suspensory bandage.

Ichthyol in Pruritus.—In the vaginal pruritus of pregnancy ichthyol has been found very useful. It may be employed in the form of an ointment, made up with lanolin. In some of these cases it has given relief where carboic acid and cocaine have failed. In the pruritus also of diabetes the drug has proved to be very useful combined with fifty per cent. of glycerin.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Discolored Tincture of Rhubarb.**—R. E. L. writes: "We have some tincture of rhubarb that has been kept in a can for about six months; it has become discolored, in some way, turning black. Can you let me know of any process to clarify it; and will it be safe to sell it over the counter as it is?"

The discoloration is probably due to contact with the iron of the tin container, and must be slight. We are unable to suggest a remedy. The discoloration is probably due to the formation of an iron salt, and should not affect the preparation injuriously. We think it would be proper and safe to dispense it in mixtures; though it might be injudicious to dispense it without admixture.

**Urine Tests.**—S. S. H. per P. writes: "Can you give me a formula for Tanret's solution, also Millon's, for testing urine." Tanret's solution is composed of:

Potassium iodide.....3.32 Gm.  
Mercuric chloride.....1.35 Gm.  
Acetic acid.....20 Cc.  
Water.....64 Cc.

Produces a white precipitate in presence of albumen.

Millon's solution for the detection of albumen and urea in urine consists of an aqueous solution of nitrate of mercury as follows: Dissolve 1 part of metallic mercury in 1 part of nitric acid. Dilute with twice its bulk of water, and filter after twenty-four hours. A yellow color soon followed by a red is produced on heating with the liquid.

**To Loosen Teeth.**—"Young Dentist" makes the following request: "You will kindly publish a formula, if you have one, of a preparation which when successively applied to a tooth loosens it so as to enable the operator to draw it with his fingers."

We know of no preparation that will loosen teeth by simple inunction. The application of mechanical force is the only thing which can be depended upon for the extraction of teeth. The Japanese dentists are said to have great proficiency in the art of extracting teeth with the fingers, but the proficiency is usually acquired through long and laborious practice, and no dependence is placed upon chemical substances. We regret we cannot assist "Young Dentist."

**Registration of Labels.** W. N.—Labels cannot be copyrighted. If protection for a label is desired application should be made at the Patent Office, Washington, where they are registered, if admitted, at a fee of \$6. It is provided that no label can be registered unless it properly belongs to an article of commerce. To be entitled to registration five copies of the label must be filed, one of which is certified to under the seal of the commissioners of patents and returned to the registrants. A certificate is good for 28 years. The cost of registering a trade mark is \$25, which must be paid on filing the application at the Patent Office.

**Flavoring for Tooth Washes.** Nova Scotia.—The most commonly employed flavoring ingredients for liquid dentifrices are mixtures of the oils of wintergreen, cloves, peppermint, spearmint, cinnamon and anise, or sassafras, wintergreen and eau de cologne. The quantities necessary to produce the best results would have to be determined by experiment.

**Perfume for Cream of Almonds.** Nova Scotia.—The formulas we print below have the merit of novelty and are said to furnish preparations of agreeable flavor.

### STORAX FLAVORING COMPOUND.

Liquid storax.....3 iss  
Oil sassafras.....3 li  
Oil clove.....ss 3 vi  
Oil orange.....ss 3 vi  
Oil lemon.....ss 3 iii  
Oil bergamot.....ss 3 iii

### PERU FLAVORING COMPOUND.

Balsam Peru.....30 parts  
Oil bergamot.....30 parts  
Oil petit grain.....31 parts  
Oil clove.....60 parts  
Oil lavender.....62 parts  
Oil lemon.....93 parts  
Tincture ambergris.....125 parts

As in the case of dentifrice flavorings, the proportions of the different ingredients should be altered to suit, and the amount used regulated by experiment.

**Catarrh Cures.**—W. E. W. writes: "Can you furnish me with the formula of a good catarrh powder similar to Birney's or Ingersoll's, which are applied with blowers."

We cannot place the formulas named. A snuff made according to the formula below may be taken as a type of an efficient catarrh snuff.

Cubeb.....1 ounce  
Borate of soda.....3 drams  
Camphor.....3 drams  
Alum.....3 drams  
Soap bark.....6 grains

Each of the ingredients must be reduced to a state of impalpable powder before mixing.

**Ferrier's Catarrh Cure** is composed of:

Morphine murate.....3 grains  
Powdered acacia.....3 drams  
Bismuth subnitrate.....6 drams

Mix. A small quantity is snuffed up the nostrils every 5 minutes for twenty or thirty minutes.

**Worcestershire Sauce.** J. F. G.—The *Scientific American* says that this is quite a complex condiment. It is made of wine vinegar, 1½ gals.; walnut catsup, 1 gal.; mushroom catsup, 1 gal.; Madiera wine, ½ gal.; Canton soy, ½ gal.; moist sugar, 2½ lbs.; salt, 19 ozs.; powdered capsicum, 8 ozs.; pimento, 1½ ozs.; coriander 1½ ozs.; chetney, 1½ ozs.; cloves, ¾ oz.; mace, ¾ oz.; cinnamon, ¾ oz.; asafoetida, 6½ drms. Dissolve in 1 pt. brandy 20° above proof. Boil 2 pounds hogs' liver for 12 hours in 1 gal. of water; add water continually so as to keep up the quantity of 1 gal.; mix the boiled liver thoroughly with the water, strain through a coarse sieve, and add this to the above mixture. It is self-evident that no chemical examination could ever detect the presence of half the above ingredients.

**Registration in New York City.**—P. S. writes: "I hold a certificate from the New Jersey board of pharmacy; will this be accepted in lieu of examination by the New York City board?"

No. The New York City board accepts no license except those issued by the different boards in the State of New York.

**Humphreys' Specific No. 77.** H. A. S.—We are unable to furnish a formula for this preparation.

**Ely's Cream Balm.** A. H. F.—This is stated to be composed of

Petrolatum.....1 ounce  
Thymol.....3 grains  
Bismuth carbonate.....15 grains  
Oil of wintergreen.....8 minims

**Silvering Glass.**—G. writes: "I wish you would publish in your next number a formula for a compound to silver looking-glasses, etc. I have tried mercury and other metals without result."

A query similar to the above has brought out an interesting contribution to the general stock of knowledge on plating mirrors from a correspondent of the *Scientific American*, who gives the formula printed below, which he states will invariably produce excellent mirrors, provided the following conditions are adhered to:

1. Pure chemicals.
2. Have the glass chemically clean.
3. Adhere strictly to the formula.

### SOLUTION NO. 1.

#### Ammonio-nitrate of silver.

Dissolve 2½ drams of silver nitrate (crystals) in 2 ounces of water, and add concentrated liquid ammonia, drop by drop, until the brown precipitate formed is nearly, but not quite, all dissolved; then add 24 ounces water, and filter three times (through cotton).

### SOLUTION NO. 2.

#### Reducing Solution.

Dissolve 1½ drams of silver nitrate in 24 ounces of water; then take 1 ounce of water in a graduate and dissolve in it 80 grains white caustic potash, and add this to the 24 ounces of solution just mentioned; then add 420 grains Rochelle salts. Filter three times.

**Note.**—Solution No. 2 will be found to have a heavy black precipitate, and it is necessary to filter same until it is perfectly clear, which can be accomplished by having three funnels one above another with filtering cotton packed in rather tightly.

Use distilled water.

To use the above solutions mix equal parts of No. 1 and No. 2 together, and flow over the glass, which, however, must be in a room heated to about 90 or 100 degrees F.

The formula printed above has been tested by the editor of the *Scientific American*, Albert A. Hopkins, and he states that he found it to give excellent results. Two parts of No. 1 to one part of No. 2 by measure gave better results than equal parts. The glass should be cleaned with caustic potash dissolved in water and should be thoroughly rinsed before silvering. The process of silvering can be hastened by having a steam table on which to lay the plate glass over which the combined solutions have been poured. A gas stove or an oven may be used. Small pieces of glass can be silvered in one to two minutes by holding them a few inches above the flame of a Bunsen burner. Defective spots may be remedied by removing the silvering around the spot with nitric acid and resilvering. If the hands become stained with the solution rub the stains with a crystal of resublimed iodine until the color begins to change, then sponge with alcohol. Only small pieces of glass should be attempted at first until the method of working the process is well understood.

**Angostura Bitters.**—P. A. R., per D., says he has given the formulas for Angostura Bitters printed in our issue of March 1 a thorough trial and finds that the product lacks the distinguishing taste and the aromatic odor of the original. He seeks additional information.

We print below a formula which is said to furnish a preparation of the same composition as the original.

Take of

Gentian.....	4 ounces
Cinchona flav.....	
Serpentaria Canad.....	
Serpentaria Virgin.....	
Glycyrrhiza.....	10 ounces
Pimenta.....	
Taraxacum.....	
Cusparia.....	
Cardamom.....	6 ounces
Balsam tolu.....	
Rhubarb.....	4 ounces
Galangal.....	
Orange peel.....	1 pound
Alkanet.....	1 pound
Caraway seed.....	1/4 ounce
Cinnamon.....	1/4 ounce
Nutmeg.....	2 ounces
Coriander seed.....	2 ounces
Catechu.....	2 ounces
Wormwood.....	2 ounces
Mace.....	1 ounce
Red sanders.....	1/4 pounds
Turmeric.....	8 ounces

Reduce these ingredients to a coarse powder and macerate them for fifteen days in 50 gallons of dilute alcohol; before filtering add 30 pounds of honey.

**Ownership of Prescriptions.**—J. F. S. & Bro write: "We would like some information as to whether there is any law in the State or city and county of New York compelling a pharmacist to return copy of prescription left with pharmacist."

We do not know of the existence of a law of the kind indicated. The prescription is held by some to be a matter of private correspondence between the physician and the pharmacist, and as such not amenable to the laws bearing on ownership of property. In cases where the prescription is *bought* with a distinct understanding to that effect, the case is different, as it then becomes property. But the proper owner of the prescription is the pharmacist.

**Pinaud's Eau de Quinine.** L. R.—Krause states this article has the following composition:

Quinine sulphate.....	1 part
Tincture of cantharides.....	10 parts
Glycerin.....	75 parts
Alcohol.....	500 parts
Tincture of krameria.....	20 parts
Spirit of lavender.....	50 parts

Dissolve the quinine in the glycerin with the aid of heat, add the tinctures of krameria and cantharides, and finally the remainder of the ingredients. Allow the whole to stand 48 hours, then filter through cotton until a clear solution is obtained.

**Elixir of Three Phosphates.**—P. R. wishes a formula providing for the use of saccharin instead of sugar. The following will be found useful:

Iron phosphate.....	256 grains
Quinine hydrochlorate.....	128 grains
Strychnine sulphate.....	2 grains
Saccharin.....	24 grains
Potassium citrate.....	32 grains
Alcohol.....	4 fl. ounces
Glycerin.....	6 fl. ounces
Hot water.....	6 fl. ounces
Ammonia water.....	40 minims

Dissolve the strychnine and afterward the quinine in the alcohol; then add the glycerin. Dissolve the iron and citrate of potassium in the hot water. Rub up the saccharin with the ammonia water and to this add the iron solution; then mix with the alcoholic solution.

**Identity Reaction of Acetanilid.** C. L. K.—Flückiger's test is fairly practical and convenient. Triturate 2 parts of the substance with 1 part of caustic potassa with enough chloroform to dampen the mixture; transfer the latter at once to a test tube and warm it very gently. The mass will continue to become hot after it has been removed from the source of heat and will turn brown. If more than 0.02 Gm.

(gr. 1/2) of acetanilid was taken, an energetic reaction ensues. The warmed mixture emits the unmistakable characteristic odor of isocyanphenol or phenylcarbylamine C<sub>6</sub>H<sub>5</sub>NC. The new edition of the U. S. Pharmacopoeia states that acetanilid dissolves to form a clear solution when agitated with colorless concentrated sulphuric acid.

**Identity Reaction of Phenacetin.** C. L. K.—The following is accounted a convenient test: Upon 1 part of finely powdered phenacetin pour two parts of nitric acid containing 10 to 12 per cent. HNO<sub>3</sub> (sp. grav. 1.075), and heat for a short time to boiling; the liquid will assume a yellow to orange color, and the phenacetine, which had at first remained colorless, will at the same time (so far as it is not dissolved) be converted into a nitro-compound of an intensely yellow color. When the liquid cools a further crop of needles of the yellow (or brownish red) compound crystallizes out. Acetanilid and antipyrin remain unaffected when treated in this manner.

**Liquid Brass Polish.** W. J. B.—It is a difficult matter to compound a satisfactory liquid brass polish owing to the fact that insoluble substances of a gritty nature are required in the composition if an efficient polish is looked for.

A mixture made by incorporating tripoli with a strong aqueous solution of castile soap will be found useful. Dissolve 8 ozs. 4 drms. of castile soap in 14 ozs. water. To this solution add 22 drms. tripoli. Color with coralline. Another liquid polish which is esteemed highly by some is made by adding aqua ammonia and whitening to alcohol as follows: whitening, 9 ozs. 5 drms.; alcohol, 1 lb.; aqua ammonia, 1 oz. 8 drms. Shake well together.

**Hinds' Honey and Almond Cream.** J. G. B.—We regret our inability to give you a formula for the preparation named; imitations of this article have never met with much success.

Regarding a substance for removing the stain of a mustache dye containing nitrate of silver and sulphate of copper, we should think that the application of a moderately concentrated solution of iodine in alcohol followed by ammonia water and hyposulphite of soda might answer; providing, of course, that the dye solution has not undergone complete reduction.

## Correspondence.

### A Wise Suggestion.

Editor AMERICAN DRUGGIST:

We have read your article of March 8 in regard to keeping a copy of all pharmacy laws and regulations in the store, and we deem it a wise and timely suggestion. It is surprising how many pharmacists are almost entirely ignorant of these laws.

Can you inform us where we can obtain a copy of all laws of our State in force outside of New York, Kings and Erie counties?

HURD & FOY, Pharmacists.

[Copies of the State pharmacy law can be had on application to the Secretary of the State Board of Pharmacy, E. S. Dawson, Jr., Syracuse.—Ed.]

The pleasantest way to take cod liver oil, says an old gourmand, is to fatten pigeons with it and then eat the pigeons.

## News and Notes.

### Iowa Pharmaceutical Association.

The fifteenth annual meeting was held at Des Moines on March 18, with a large attendance from all parts of the State. The convention was called to order by President Milo W. Ward, and Secretary Dr. Rosa Upson made her annual report. Fred. Lax as chairman of the committee on adulterations read an interesting report which Frank Edel took as his text for a few well considered and interesting remarks on adulterations and impurities. The reading of the president's address was listened to with the closest attention. It was an able and forcible paper in which the present status of pharmacy and the laws pertaining to pharmacy in Iowa were fully dealt with. He considered the permit system a subject which should be approached with delicacy. He said: "In its present form it never was, is not now, and never can be popular with pharmacists possessed of professional honor." W. H. Torbert delivered a very able address on matters of legislative interest, and a resolution was passed that it be arranged in the form of a memorial to the State senate.

Prof. Sherman R. Macy of Highland Park College read a paper on "Pharmaceutical Education." A. M. Ruethe of Dubuque gave an interesting paper on the "Assay of Tea." J. H. Harrison of Davenport spoke on the "Pharmacy Department of the State University." J. W. Ballard of Davenport read some sound logic on "Practical Pharmacy." Resolutions introduced by H. W. Dyer, asking that the State pharmacy commission require two years of practical experience instead of one from applicants for certificates, passed unanimously. The idea is to have twelve months of college work go for one year, but an additional year's experience must also be had.

The following resolution relating to the late speech made by Senator Cockrell was unanimously adopted:

WHEREAS in the recent press dispatches quoting Senator Cockrell's speech were disparaging remarks relating to the statement by our legislative committee that alcohol is a necessity, more so than tea or coffee, be it

Resolved by the Iowa Pharmaceutical Association at this its fifteenth annual meeting that, with due respect to the distinguished senator from Missouri, we affirm the statement made by our committee, that alcohol is a greater necessity than tea or coffee, and further recommend that such provision be made for its strict use in the arts and medicine as would reduce rather than increase the tax on alcohol, and in this recommendation we are confident of the support of our fraternity and scientific bodies throughout the Union; that the secretary be requested to promptly send copies of this resolution to our senators and representatives in congress and to Senator Cockrell.

Officers were elected for the ensuing year as follows: president, Milo W. Ward, Des Moines; vice-presidents—Mrs. Carrie S. Collins, Garner; E. M. Burns, Mason City; W. B. Elliott, Knoxville; secretary, Suel Spaulding, Indianola; treasurer, J. B. Webb, De Witt; executive committee—A. H. Miles, Des Moines; A. A. Bradie, Waverly; John C. Nitzsche, Maquoketa.

At a meeting of the Pittsburg College of Pharmacy, held Monday, March 26, the following officers were elected: President, A. C. Robertson; 1st vice-president, Louis Emanuel; 2d vice-president, Peter Weber; treasurer, Louis Brehm; recording secretary, George W. Kutscher; corresponding secretary, Samuel Jamison; curator, J. A. Shaffer; librarian, T. F. Aschman.

**LOUISIANA BOARD OF PHARMACY.**—The committee on examinations held an examination of applicants for registration on February 10, with the result given below as follows: Of six applicants for certificates as qualified assistants the following five were successful: Chas. A. Lopez, E. F. Bacon, F. E. Weilbaeher, C. G. Magruder, and G. Charbonnet, all of New Orleans. Of nine applicants for certificates as registered pharmacists the following three were successful: H. J. Fournet of St. Martinsville, B. F. Holmes of Frankllyn, and C. G. Magruder of New Orleans.

**KANSAS BOARD.**—At the regular meeting of this board held at Fort Scott on March 8 certificates were issued to the following applicants: Pharmacists—J. E. Maxwell, Oswego; Thos. Bailly, Independence; George W. Rice, Ashland; E. J. Fish, Sedan; W. B. Roche, Geneseo; Ross O. Smith, Hill City; F. W. Butler, Yates Center; E. B. Van Ness, Mound City; A. L. Dicer, Wichita; Will C. Laughlin, Hanover; D. B. Hickey, Chanute; A. N. Beasley, Carbondale; S. M. Ochiltree, Haddam; R. S. Treat, Hutchinson; Charles L. McAdams, Wichita; Leonard Calvin, Wichita; Leon Johnson, Summerfield; P. A. Harrison, Phillipsburg. Assistant pharmacists—Ernest A. Landwehrkamp, Leavenworth; W. D. Benham, Pleasanton; Carl Opp, Atchison; Gill L. Blatchly, Northcott; W. Ed. Brewer, Peabody; D. Phillips, Concordia; Chas. C. Moore, Galena.

**THE NORTH DAKOTA BOARD OF PHARMACY** met at the "Metropole," Fargo, March 14 and 15. Messrs. White, Hanssman and Parker were present and conducted the examinations. There were twelve applicants, seven of whom passed a satisfactory examination, viz.: Wm. Smith, Willow City; E. P. Haglund, Little Falls, Minn.; S. John Erickson, Hillsboro; J. W. Lucas, Bismarck; E. D. Holmes, Havana; R. K. Sattler, Michigan City and J. J. Keen, Wahpeton. The first day was occupied with identification of specimens and written examinations. Practical work and oral examinations were conducted on the second day. The following licentiates of other State boards were registered without examinations; G. O. Bundy, Emerado; R. A. Brackett, Fargo; C. F. Saytor, Necke, and J. H. Long, Hatton. Seventeen assistants were registered as per section 12. In future the examinations will consist of the reading and compounding of prescriptions and manufacture of pharmaceutical preparations, also the usual written and oral examinations in materia medica, pharmacy, chemistry and toxicology. In practical work the candidate will be marked on method, accuracy and general appearance of the finished product. Blank applications can be procured of the secretary and should be filled out and returned to the secretary, W. S. Parker, Lisbon, N. D., with the fee, at least three days prior to the date of meeting.

### Dined by Students.

The professors of the Philadelphia College of Pharmacy were given a complimentary banquet, on Wednesday, March 14, at the Hotel Metropole by the Alpha Phi fraternity. About forty members and their guests sat down to the repast. The banquet committee was composed of Messrs. Tarr, of Ohio; Hall, of Pennsylvania; Bowman, of California; Ridgway, of Washington, and Lauer, of Oregon.

William Edgar Porter, the toastmaster, presided in a very happy manner, and proposed the toasts, which were responded to by President George P. Benford, Prof. Joseph P. Remington, Harry Herbert Cline, Prof. S. P. Sadtler, J. Clayton Zeigler, Prof. E. S. Bastin, Robert Carson Hall, Bertha Leon De Graffe, Prof. Henry Trimble, Emanuel Hiram Lauer, Thomas S. Wiegand, Robert H. Tarr, Prof. Frank G. Ryan, Colin Spangler Few, Prof. Frank X. Moerk, John B. Caffrey, Prof. George M. Berringer, Bertram Bowman, Prof. C. B. Lowe and Will F. Ridgway.

### New York.

A special show case in Wilson's thirty-fourth street store is devoted to grease paint and the various accessories to the toilet of the Thespian. It smells like an old tallow candle factory. "Yes, the business is a peculiar one," said Manager Boisenot the other day, "but is on the whole satisfactory, as though the margin of profit is low our sales are considerable. We carry the two leading brands of grease paints, Meyer's and Hess's, for some actors insist upon having the one, while some use the other. No, we do not attempt to make any ourselves, though we do make some of the toilet accessories, as cold cream, for instance. We do a large business in our own make at \$1 per pound. We are very careful in its manufacture and use only the best materials. Many actors are Jews and are very careful to avoid the use of anything containing lard. Much of the cheaper kinds of cold cream is made up from lard and so we have orders from people in the profession all over the country for our cold cream. This is used principally in removing the 'makeup' from the face. The whole face is smeared over with the grease paint and on this powder is put. To take this off cold cream is smeared on and the whole wiped off with a dry towel. Do I like 'theatrical people' as customers? Yes, decidedly, though good actors and actresses are much less 'theatrical' in their ways than are the newly fledged chorus girl and the 'supe.' The real actor and actress do not talk 'shop,' they are quiet, business-like and reticent. When I see a customer very theatrical in appearance, I know at once that he or she is at most only just within the pale of professional life. This plastic putty is a very important thing in 'makeup.' Theodore Roberts, who plays the Indian chief in 'The Girl I Left Behind Me,' uses one of these cakes every night in making up his face, changing the outlines from clear-cut, thin, classic features to the high cheek bones and broad-based, high-arched nose of the Indian. Though on the stage but seven minutes Mr. Roberts takes a whole hour for his 'makeup,' applying these paints, putty, etc."

The pharmacy at 226 Grand street, Newburgh, which formerly belonged to F. W. A. Reuter, is now owned by F. Wallace Ph.G., who is making quite a successful thing of it.

Clarence Strecker, class of '98, N. Y. C. P., who is now with Chas. Denel, at Amherst, Mass., was in the city last week visiting some of his old college friends.

Maxim Auerbach and Henry Fendler of this city, and Chas. Prior of Middletown, members of the senior class N. Y. C. P., were all up before a police magistrate recently on the charge of prize fighting. The first two students are reported to have been at loggerheads for some time, and a mill was arranged to settle matters,

### Quiz Box.

*This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.*

*Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.*

*Address Editor Quiz Box, 37 College place, New York.*

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elxirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

31. Explain the difference between an atom, a molecule and a mass.
32. What is a monad, a diad and a triad?
33. What is the difference between a chemical and a physical change? Give illustrations.
34. What element is the most plentiful and by what process is it generally prepared?
35. Explain combustion.
36. What is meant by atomic and what by molecular weight?
37. What is meant by a chemical symbol and what by a chemical formula?
38. Give Dalton's hypothesis.
39. Give Avogadro's law.
40. What is an amorphous body?
41. How many pounds of diluted acetic acid, U. S. P., can be made from one pound of absolute acetic acid?
42. Name the ingredients entering into the compound licorice powder of the U. S. P.
43. What is the weight of a fluid ounce of water?
44. How much jalap of 10 per cent. must be mixed with jalap of 16 per cent. to make one pound of jalap of 12 per cent.?
45. Reduce 4° C. to Fahrenheit?

*Read the "trade notes" and the market reviews every week if you want to keep posted.*

### Hand Book of Mexico.

Phillip G. Roeder, 664 Cedar avenue, Cleveland, Ohio, and Calle de la Palma No. 2, Mexico City, Mexico, has published a "Hand-Book on Mexico" for the use of manufacturers and exporters in the United States.

He offers it as a book of reference and to facilitate the mailing of catalogues, circulars, commercial literature, etc.

The book has 65 pages, 7 by 8¼ inches in size, neatly bound.

The lists cover 48 of the leading cities with name of State in which each is located, how reached, population, route of direct mail, names of railroads entering the place and noted as credits.

Explanation is given of common Spanish abbreviations translated into English, as well as valuable general shipping directions, which merchants here will profit by if heeded.



## Trade Notes.

Wm. Phelps, Charles M. Phelps and M. C. Webber, having offices at 87 College place, New York City, were granted articles of incorporation at Albany on the 26th inst. under the title Painsfoe Chemical Co. of New York.

There is profit in handling the Arnold Steam Sterilizer, as it sells readily to physicians and the general public. Druggists would do well to get particulars of this from Wilmot Castle & Co., manufacturers of the Arnold Steam Sterilizer, 28 Elm street, Rochester, N. Y.

North Carolina pine tar in convenient 2 ounce cans can be obtained to advantage from Jas. Good, Philadelphia, Pa., the widely-known makers of Good's carbolic and disinfectant soap, Good's dog soap, Toland's carbolic and disinfectant soap, and other specialties of a similar character.

*Le Confort des Enfants* is French for "The Children's Comfort," an elegant pharmaceutical compound prepared and sold by Geo. E. Fairbank, druggist, 10 Front street, Worcester, Mass. A card from Mr. Fairbank, inviting druggists to send for descriptive circulars of this profitable compound, will be found in this issue.

The Crown Perfumery Co., 160 Fifth avenue, New York, have an announcement in this issue relative to their latest novelties. Druggists will consult their own interests by procuring a copy of the Crown Perfumery Co.'s price list and catalogue, which contains interesting particulars of the firm's method of regulating the sale of their goods.

It has been decided by the Royal Administration of Medicine in Sweden to publish a new edition of the Swedish Pharmacopoeia. The Chief Director of the Administration (M. Almén) has been appointed president of a revision commission of seven members, of whom two are medical men, two professors of pharmacy, one Court pharmacist, and one a pharmacist in business.

In this issue the Antikamnia Chemical Co., St. Louis, bring an interesting illustration of the style of package adopted for their tablets of Antikamnia and Quinine and Antikamnia and Salol. These elegant pharmaceuticals can be ordered through any jobbing druggist. The Antikamnia Chemical Co. will send a supply of interesting literature on Antikamnia and its combinations to anyone making application.

Distilled extract of witch hazel in bulk form can be obtained best from E. E. Dickinson & Co., distillers, Essex, Conn. Dickinson's extract is admitted to be the purest and strongest extract made, and druggists who aim to keep standard preparations of undoubted purity should not fail to specify Dickinson's when ordering from jobbers. Quotations on quantity lots can be had by addressing E. E. Dickinson & Co. as above.

The Mayell-Hopp Co., Cleveland, O., put up a most popular toilet preparation under the name of Witch Hazel Jelly. To bring the Jelly prominently before the public they have designed a neat and attractive envelope for use by druggists in sending out small packages. Any of our readers who care for a supply of these useful little articles should write to The Mayell-Hopp Co., at the address given, and 300 will be sent free of cost.

The well known house of C. G. Bacon

& Co., wholesale druggists and manufacturing chemists, 20 College place, New York, are to have a two-page advertisement in the special anniversary issue of THE DRUGGIST AND RECORD which will be published on April 12. As the paper will on that occasion reach a circulation of 25,000 copies, the business sagacity of the firm will undoubtedly produce good results. The advertisement should be looked for, and when found closely studied. It will well repay perusal.

The perfumes and toilet specialties of Ed. Pinaud are among the most highly esteemed of all preparations of their kind, and druggists who aim to keep only the best should carry a line of the exquisite odors bearing the name of Ed. Pinaud. In the cover page advertisement of this issue readers are invited to supply themselves with price lists and free samples of these exquisite perfumes, which can be had by addressing Ed. Pinaud's importation office 43 East 14th street, and mentioning this journal.

Cushman's Menthol Inhaler is one of the most salable little novelties ever introduced to the drug trade. A glance at the advertisement of H. D. Cushman, manufacturer, in this issue will reveal a reason for its popularity. It is neat in appearance, convenient to carry and lasts for a long time without renewing. Druggists can recommend this little device with the utmost confidence. If it cannot be obtained from the nearest wholesale druggist a card to H. D. Cushman, manufacturer, Three Rivers, Mich., will bring a supply.

The leading specialists in skin diseases pin their faith to Packer's Tar Soap as the remedy *par excellence* in the treatment of dandruff, baldness and skin diseases. The leading druggists of the country keep Packer's Tar Soap because it is constantly prescribed by physicians and is recognized everywhere as the best soap made. The leading dealers everywhere make good use of the advertising matter consisting of banners, books, cards, etc., which the Packer Mfg. Co., 100 Fulton street, send free on request. You can obtain a supply by mentioning this paper. It will increase your sales.

Considerable attention has been directed of late to the necessity of employing pure and reliable vaccine lymph in inoculations against small-pox. The necessity for this becomes the greater during times of threatened epidemics. The disappointment and suffering which follow the use of worthless or impure lymph is often very great, and druggists should therefore take every precaution by purchasing lymph of known purity. This can be done by ordering their supplies from the New England Vaccine Company, Chelsea Station, Boston, who announce their willingness in this issue to send circulars of information to druggists upon request.

W. H. Torbert in his trade review dated Dubuque, Ia., March 31 says:

We wish to congratulate the pharmacists of Iowa that none of the various attempts to secure legislation prejudicial to the interests of pharmacists in Iowa have succeeded, and it may be practically stated that no legislation prejudicial to the interests of pharmacists in the present general assembly of the State will be enacted. To the Iowa State Pharmaceutical Association, its officers and members, and its legislative committee, much credit should be given; and in appreciation of this work of the Iowa State Pharmaceutical Association, pharmacists generally throughout the State, who are not members, should send their names forward to join the Association. A strong effort was made to make a \$600 liquor tax, as in the Mulct bill, applicable to saloons, apply to drug stores. The failure to accomplish this alone is a saving to every pharmacist who sells or uses liquor in Iowa of \$600 per year, and other bills not less disastrous were proposed and defeated.

Frederick F. Ingram & Co., Detroit, Mich., pointedly observe that "the druggist who allows all his trade to run to cut-rate patent medicines, when by a little personal effort he could make a good profit on the most of his sales, and at the same time be selling better remedies, is a hard case." The firm of Frederick F. Ingram & Co. is one of the most progressive of the many progressive drug firms in Detroit. The variety and styles in which they put up preparations for the trade is referred to as well-nigh infinite. Preparations in the line of non-secrets can be furnished by Frederick F. Ingram & Co. cheaper than the druggist can prepare them, and in a far more attractive and salable package than his facilities usually will permit him to Sarsaparillas, carminatives, salves, pills, condition powders, and fly paper being now in season druggists are invited to correspond with the firm at the address given. Estimates of the cost of putting up any desired specialty will be cheerfully furnished if THE DRUGGIST AND RECORD is mentioned at the time of writing.

Our representative dropped in at the Cadillac Hotel, Detroit, the other day, and while there met over twenty different traveling salesmen representing various drug concerns. There is no question but what the kindly treatment extended by the proprietor, Mr. Graves, to the members in attendance at the last National Wholesale Druggists' convention has resulted in this increased number of drug guests. Mr. Graves enjoys a well deserved popularity among drug salesmen.

## Antipyrin in a New Form.

Schulze-Berge & Koechl, 79 Murray street, New York, sole licensees for the sale of antipyrin, announce that the manufacture of Dr. Knorr's Antipyrine in the fine granular form in which it is now supplied to the trade admits of the production of a purer and more reliable article than that formerly supplied. In Europe, where it has thus been furnished for a considerable time, the medical profession has observed better therapeutic effects from its employment than those which have resulted from its use in its finely powdered form. In the future, therefore antipyrin will be manufactured and sold in this fine granular condition only.

## The Druggist's Calendar.

By JAMES F. BABCOCK.

New almanacs the druggist man  
Sends out to all in month of Jan.  
In point of sales the lowest ebb  
Is found each year in shortest Feb.  
Now blust'ring winds the fixtures jar  
And dust fills up the store in Mar.  
Blood med'cines now are on the tape,  
For sars'parilla sells in Ap.  
The flow'r-seed man next has his say  
And sends commission goods in May.  
The root-beer fiend doth importune  
And starts his trade along in Jun.  
The ice-cream soda thirst doth cool  
And flies about in sunny Jul.  
Look now for colic and mad dog;  
Jamaica ginger goes in Aug.  
Gas bills have late much higher crept;  
We light up earlier in Sept.  
Front windows now are fully stock'd  
With lung-protectors bought in Oct.  
The porter next puts up the stove  
And awnings down in gloomy Nov.  
Receipts from trade somewhat increase  
From Christmas sales in wintry Dec.  
Thus ev'ry month hath something new  
For druggists' busy hands to do.  
Continued change the seasons fill,  
But no change comes to druggist's till.  
The reason's plain—'tis very clear,  
The cutter's with us all the year.

## Review of the Wholesale Market.

NEW YORK, April 4, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The month has closed upon a quiet market for nearly all lines included in the several departments of drugs, dyestuffs and chemicals; but this is not to be taken as an indication of an unusual falling off in the trade volume, as a careful inquiry into the condition of business during March, 1894, shows that the volume of trade has been in excess of that of corresponding months of previous years. The market has a tame appearance owing to the cautious policy of buyers in restricting their purchases to broken packages and covering only current necessities. The majority of dealers attribute the lack of speculation to the delays of legislation, the uncertainty regarding tariff matters being openly commented upon. There is in fact no demand for round lots, either speculatively or otherwise, the low quotations of many lines influencing no important action. In the mean time values are maintained with a pretty general exhibition of strength, and where changes occur in most instances they are in the interests of holders. The more important fluctuations are tabled below as follows:

ADVANCED.	DECLINED.
American saffron.	Caraway seed.
Balsam Peru.	Chicle.
Celery seed.	Chlorate of potash.
Chinese cantharides.	Cod-liver oil.
Damiana leaves.	Jaborandi leaves.
Kola nut.	Oil of orange.
Lycopodium.	Opium.
Mustard seed.	Quicksilver.
Nitrate of soda.	
Quassia seed.	
Serpentaria root.	
Spermaceti.	

## DRUGS.

ACETANILID continues held at 35 @ 36c. as to quantity, and a fair distributed trade is reported.

ALCOHOL continues in steady, fair request notwithstanding the irregular condition of prices. The open range of the market from trust producers is quoted \$2.24 @ \$2.28, but these figures are being shaded in some instances down to \$2.18 with the object of retaining trade that is likely to drift to outside sources for supplies. Outside parties in New York are quoting at \$2 @ \$2.05 per gallon by the bbl. and a divergence in quoted prices is quite noticeable.

ARNICA FLOWERS are passing out in moderate quantities to the trade within the range of 10 @ 11c.

BALSAM COPAIBA has been in active demand during the week and we are reported sales of 20 cases Maracalbo and a few barrels Para on private terms. We quote the range for all grades at 33 @ 40c.

BALSAM PERU continues in demand and scarce with the range of the market firm at \$1.65 @ \$1.70 for true.

BARKS.—Cascara Sagrada continues in moderate demand with 5 @ 6c. demanded for spot goods; the quantity offered at the inside price is limited, however, and 6c. is generally asked. Cascarilla Bark is exceedingly scarce and offered sparingly at 7c.

BUCHU LEAVES, short, have been in fair request during the interval, and the market is firm with 10 @ 12c. quoted as to quality.

CACAO BUTTER is firmly sustained within the range of 32 @ 34c., the inside for English; sales amounting in the aggregate to some 7,000 lbs. are reported at the inside figure.

CANTHARIDES are in moderate demand, with Chinese in most favor, and prices show continued firmness, though nominally unchanged.

COD LIVER OIL has attracted less attention during the week just closed, the change in the condition of the market is the result of a reported break in the value at primary sources, firm offers of shipments of new oil at the equivalent of \$28.50 laid down here, duty paid, having been received by wire. This irregular condition has naturally prompted a feeling of reserve among holders, and values are uncertain. The nominal quotation of the market is now \$27 @ \$28.

CUBEB BERRIES continue to meet with a fair jobbing inquiry, but no large sales are reported, and the market is steady at the previous range.

ERGOT is meeting with very little inquiry and the market has a tame and featureless appearance at nominally unchanged quotations.

JUNIPER BERRIES are in moderate demand with sales of 25 bags reported at 2½c.

KOLA NUTS are in improved demand and cable advices report sales in the London market at the equivalent of 24c.

LYCOPodium is advancing into firmer position, cables from Hamburg advising a stronger market with 5½c. representing the present cost to import outside brands. In this market Politz is quoted up to 56 @ 58c. and other brands 52 @ 54c.

NUX VOMICA has receded slightly from the former range; recent sales in London at the equivalent of 2c.

OPIUM has developed no action of consequence during the week. There has been a noticeable lack of speculative inquiries and the market has continued dull and uncertain. Case lots are, now quoted \$2.60, which is a reduction of 7½c. from last week's price. This figure, it is thought, could be shaded on a firm bid for a larger quantity, \$2.55 being quoted in some quarters as acceptable. The jobbing value remains \$2.62½ @ \$2.65; powdered is a trifle easier with \$3.45 @ \$3.50 now quoted.

QUININE continues in fair jobbing demand with every indication of a steady market, purchases, however, are being made to bridge only current necessities, and there is no movement of any consequence to report. Manufacturers' prices are firm at 25c. for large bulk form and 27½c. for domestic. From outside hands foreign brands are offering at 23½ @ 24½c.

SENNA, Tinnivelly, has continued in request with some hundred bales for forward shipment from Hamburg reported sold on private terms. The quotations of this market are unchanged at 6 @ 18c. as to quality.

ST. IGNATIUS BEANS are held in small and closely concentrated stock with 60c. quoted firm.

SOAP, Castile, Contif's, continues in good demand and firm at 9½ @ 10c.

## DYESTUFFS.

CUTCH continues in steady, moderate demand and firm at 5½ @ 6c. for prime quality bales.

DIVI DIVI continues held at \$55 @ \$65. The demand, however, is limited.

GAMBIE continues dull and neglected, though the market appears steady in tone at 4½ @ 4¾c. for steamer and sail goods as to quality.

MADDER continues in steady moderate request and firm at full previous prices.

NUTGALLS, blue Aleppo, are maintained steady at 13¾c. and jobbing sales are reported at these figures.

SUMAC, Sicily, is quiet but the market appears steady at \$72.50 @ \$77.50 as to brand and quantity.

## CHEMICALS.

ALUM is in steady moderate request with the current sales \$1.75 for lump and \$1.80 @ \$1.85 for ground.

AMMONIUM CARBONATE, English, meets with steady fair inquiry with sales at 8½c. for casks.

ARSENIC, white, continues in moderate demand and scarce at the inside price of 3¾c.

BLEACHING POWDER is held at 2½c. for German and 2¾c. for English but the distribution at the moment is limited and there is seemingly no pressure to realize at anything below the figures quoted.

BLUE VITRIOL is maintained firmly from the hands of manufacturers with the current sales at 3½ @ 3¾c.

CHLORATE OF POTASH is easier and now offering at 14 @ 14½c. for German and 14 @ 14½c. for English; powdered is held at 14½c.

CREAM TARTAR is very firm and we hear of numerous small sales of crystals and powdered at 17½c.

CITRIC ACID continues in fair jobbing inquiry, though the market is less firm in tone. Manufacturers continue to quote 42½ @ 43c. for barrels and kegs, though from second hands these prices could be shaded ½c.

IRON SULPHATE (copperas) is firmer and quoted 70 @ 85c. for spot goods; contracts for forward delivery can be placed down to 60c.

NITRATE OF SODA has continued in request, but holders are seemingly not disposed to offer goods freely and quote \$2.15 @ \$2.20 as to quality. Spot at \$2.12½ @ \$2.15 to arrive as to date.

OXALIC ACID continues inactive; moderate sales within the range of 6½ @ 6¾c. for German and 6¾c. for English.

QUICKSILVER has still further declined, being now quoted 46 @ 47c. with a fair demand experienced.

SAL AMMONIAC, white grain, has continued in steady fair inquiry with 7c. quoted inside.

TARTARIC ACID is well sustained with the current sales at 21½ @ 22c. for crystals and powdered.

## ESSENTIAL OILS.

ANISE is in moderate demand; numerous jobbing parcels have gone out to consumers at about \$1.45.

CASSIA is quiet, but firm with sellers at 85c.

CLOVE continues fairly steady at nominally unchanged quotations.

CUBEB remains quiet, though the quotations of the market are unchanged, \$1.50 @ \$1.70 being generally asked.

LEMON and other Messina essences continue quiet. Best brands orange and lemon are held at \$1.35 @ \$1.45 and Bergamot \$2 @ \$2.25.

PEPPERMINT continues quiet, though holders are not disposed to urge sales at any even session from the quoted range. Western held at \$2.30 and Wayne Co. at \$2.50. The lowest quotation for HGH is \$2.75. Bulk remains at \$2.30 @ \$2.50 as to quality.

SASSAFRAS, pure, continues held at 36 @ 40c. as to quality.

WINTERGREEN is jobbing fairly at \$1.40 @ \$1.50 for true.

## GUMS.

ALOES, Cape, has offered freely since the receipt of some 50 cases from primary sources quoted 4½c.

ASAFETIDA is selling quite freely in small quantities and the market retains a firm appearance with the quotation steady at 15 @ 30c. as to quality.

CAMPHOR is without new feature; the market is firm in tone at previous range.

CHICLE is quiet and prices are somewhat irregular with goods offering from some holders at 24c., the quoted range is 25 @ 27c.

GUAIAC is in moderate demand with sales at 15 @ 20c.

SENEGAL and other Acacia gums remain quiet with nothing special doing. Arabic, sorts, held at 10 @ 11c., and Senegal 9 @ 9½c.

SHELLAC is meeting with moderate consumptive demand with a fair show of speculative interest extended. DC is quoted 35c., VSO 33c., and TN 25 @ 26c.

TRAGACANTH remains at 54 @ 56c. for first flake, Aleppo, and 30 @ 38c. for third and fourth flake.

## ROOTS.

The market is quiet for most descriptions with few changes in price to report.

ACONITE, German, is meeting with fair jobbing inquiry at 11½ @ 12c.

DANDELION is in moderate request with jobbing sales at 8 @ 9c. for German.

GINGER, Jamaica, is meeting with about the usual inquiry, with sales of unbleached reported at 12 @ 14c., and bleached 14½ @ 17c., as to quality.

GINSENG is arriving very slowly, but important inquiry is yet absent. The quoted range is \$2.50 @ \$3.25, as to quality.

GOLDEN SEAL is offering at 21½ @ 22c., and we hear of numerous small sales at this range.

IPECAC is generally held at \$1.27½ @ \$1.40, as to quality; only small sales are reported.

JALAP is easier, owing to fresh stock additions; but stocks are maintained at the previous range of 20 @ 23c.

SARSAPARILLA, Mexican, is easier, with current sales at 8½ @ 9½c., as to quality.

SENEGA is in better demand and firm at 38½ @ 40c.

SNAKE, Texas, is quoted 35c. and we hear of numerous small sales at this figure. The available supply is small.

## SEEDS.

ANISE, Star, offers freely at the range of 18½ @ 19c.; German is firm at 8c. and sifted Italian 9½ @ 10c.

CANARY continues inactive but without change in price. Smyrna continues to offer 2½ @ 2½c.

CARAWAY, Dutch, offers more freely with down to 6½c. named. There is, however, little or no inquiry.

CELERY continues to offer in a limited way at 17c., though the quoted range remained 18 @ 19c.

CORIANDER is scarce and firm at 7c.

MUSTARD, California, is very firmly held at 3½ @ 4c. for yellow, and 3½ @ 3½c. for brown.

## Notes on Prices.

## CHEMICALS.

Powers & Weightman, manufacturing chemists, Philadelphia, in their April circular, request the trade in ordering U. S. P. articles to kindly specify either U. S. P. 1880 or U. S. P. 1890. The circular states that "Nothing being said to the contrary, we should send according to the U. S. Pharmacopoeia of 1890, to be strictly correct; but we find that the 1880 edition is frequently intended when

nothing but U. S. P. is written. Hence we desire to be definitely advised." The prices current notes advances in acetanilid and benzoic acid.

## A Herbarium for Philadelphia.

The Martindale Herbarium, which is reputed to be the largest systematic private herbarium in the United States and one of the largest in the world, has been purchased for the Philadelphia College of Pharmacy by the Smith, Kline & French Co., the well-known Philadelphia drug house. The formal presentation will take place as soon as an opportunity is afforded by the trustees of the college.

The desire of the donors in securing the Martindale Herbarium for the College of Pharmacy is to keep that institution in the front rank of similar colleges in the United States. The Martindale collection is said to contain upward of 200,000 different plants and ferns gathered with the utmost care from all parts of the world. The collection cost many years of research and upward of \$10,000.

The title and cover page of the *Journal of the Pharmaceutical Society of Japan* for January, 1894, is printed in Roman type, English words. Heretofore it has been a good deal of a puzzle for those unacquainted with the Japanese language to tell which was first page and which was last of the periodical. The new departure is a commendable one, and if the editor will but follow it up by printing an occasional article in English he will render an all-round service to a circle of interested *savants* whose zeal for science does not extend to the acquirement of proficiency in the language of the Japs.

Dr. Louis Crusius, Ph.G., St. Louis, has favored us with a copy of the "Funny Bone," a compilation of original jokes, caricatures, humorous sketches, etc., of particular interest to physicians and pharmacists, which the Funny Bone Publishing Co., 1421 Market street, St. Louis, Mo., have issued recently at 50 cents a volume. The illustrations of this humorous publication are above the ordinary run of comic work and should contribute to a wide circulation among those of the pharmaceutical and medical professions who love a good joke.

The *Times and Register* is a weekly journal of medicine and surgery edited by Dr. Frank S. Parsons and published by the Medical Press Co., Limited, at 1725 Arch street, Philadelphia. It has recently divided its pages into departments which have been placed in charge of the several members of the editorial staff, an

arrangement which adds considerably to the value of the periodical, as it facilitates reference and gives the stamp of authority to the matter printed. The *Times and Register* gives every indication of being a success in its particular field.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

## POSITIONS WANTED.

REGISTERED CLERK in Connecticut wants position; best references; 6 years' experience. Address "Morphia," 46 Bank street, Waterbury, Conn.

WANTED.—Situation by registered pharmacist in Connecticut; 9½ years' experience; best references. Address "Quinine," 709 South Main street, Waterbury, Conn.—14.

WANTED.—A thoroughly competent druggist seeks a position as clerk or manager of a pharmacy; 13 years' experience; speak, read and write German as well as English; A No. 1 reference, and plenty of it; Ohio preferred. Address E. W. SPANNAGEL, 495 S. Washington avenue, Columbus, Ohio.

ANY DRUGGIST in need of a thoroughly competent and sober clerk, a graduate P. C. P., unmarried; long experience in city and country, please address "Senna," care this office.—14.

DRUG CLERK, age 25, American, six years' experience, desires permanent position; reference, present employers. Address "Drugs," Box 424, Haverstraw, N. Y.—14.

YOUNG MAN, 20, desires position in wholesale drug house, any department; graduate N. Y. C. P.; three years' retail experience; willing to work; references; salary no object. W. S., Box 8, Belleville, N. J.

COMPETENT DRUGGIST desires permanent position in country; married; age 22; five years' experience; will go anywhere; A1 references; salary \$14. Edward C. Bell, Mamaroneck, N. Y.

WANTED.—A position, either city or country, from May 1; at present a senior student of the N. Y. C. P.; 23 years of age; single; no bad habits, using neither tobacco nor liquor; A1 references. Address "Stillingia," 203 West 21st street, New York City.

## BUSINESS OPPORTUNITIES.

WHY NOT OWN RESPECTABLE and lucrative business in a large city and employ salesmen for surrounding towns; we will give exclusive territory for a quick selling business specialty to men of ability and small capital; the goods are necessary, and the periodical supplies yield permanent and profitable returns. Address "Profitable," care this office.—14.

NEW ENGLAND DRUGGISTS, or any others who may desire to purchase an old-established business in Fall River, Mass., and obtain control of a valuable line of proprietary remedies, are invited to communicate with N. U. Lyon, Lynn, Mass.; the store is located at the end of an electric car line in a fast growing district, 1½ miles from city center and one-third mile from any drug store, and has been established on this spot for 35 years; the proprietor is growing old (72) and is obliged to retire. N. U. Lyon, Lynn, Mass.

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# American Druggist and Pharmaceutical Record.

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Editor AMERICAN DRUGGIST:

Find inclosed money order to pay my subscription to the DRUGGIST AND RECORD from January to December, 1894.

Since the introduction of the quiz box it is more interesting than ever, and I consider the paper indispensable to the enterprising druggist.

T. J. DERRYBERRY.

CENTERVILLE, TENN.

### AN INTERESTING NUMBER.

READERS of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD are to be congratulated on the wealth of interesting matter that is placed before them for perusal in this issue. The best pharmaceutical writers of two continents have been laid under contribution to supply articles on pharmacy in all its varied aspects.

Pharmacists who are interested in the art as pursued in Paris—the Mecca of all good Americans—will read STERLING HEILIG's illustrated article on "Paris Pharmacies" with real interest. HEILIG knows Paris as only a journalist of Bohemian instincts can, and his information concerning the Paris pharmacist is thoroughly up to date.

"A. HAWK-EYE KODAK" contributes a valuable article on a profitable side line—photographic supplies. The desirability of keeping a small assortment of the photographic chemicals and apparatus in most common use has been already recognized by a number of Gotham pharmacists; and their experience has been that capital invested in this way has produced fair returns.

FRANK EDEL is a capable exponent of working methods in the field of practical pharmacy, and his illustrated article on "Tablet Triturates" will well repay perusal. He shows how the pharmacist can be independent to a certain extent of the manufacturing firms in the manufacture of tablet triturates, and at the same time turn out better work. When pharmacists learn to make their own tablets it will not be necessary, as Dr. MCFERRAND has wisely observed, for them to buy one hundred tablets to fill a prescription of ten.

Of equal interest will be the article on elixir formulas, contributed by ELBERT E. FISHER. Coming from a practical experimenter who has given the subject careful thought, the formulas can be relied upon to produce satisfactory compounds.

"How to Prevent the Accumulation of Dead Stock" is cleverly told by JNO. W. BALLARD in an article in which he relates his experience with the transfer of a dead stock of drugs for some Kansas real estate.

"The Pharmacist as a Citizen" and the advantages which accrue to him from

taking a prominent part in the local interests of the place are discussed in a well-considered article by R. J. HARDY.

The many special articles cover a wide range of subjects and will come as a surprise to the large number of pharmacists outside of our regular subscribers to whom this issue of the journal will be sent.

### SELF HELP.

THE Interstate Retail Druggists' League is making steady and substantial progress. The meeting of the New York City branch last week was an unusually interesting one both in regard to the number of members present and the character of the discussions. The secretary reported that the signatures of some 400 pharmacists had been secured to the rebate plan. Similarly cheering reports are to hand from other branches of the League, and it would seem that pharmacists are at last becoming awakened to the necessity of organization as a means of self protection.

On page 199 President Stiles of the Apothecaries' Guild of Boston and vicinity makes a stirring appeal to the drug trade of the country to organize. This appeal is that of a practical business man to practical business men. It is not written from the dilettante point of view but with a thorough and practical knowledge of the subject treated of.

There is no visionary aspirations for the impossible in the League and its plans, but a clear-headed, far-sighted systemization of forces, which, if dissipated in ununited efforts, will be utterly wasted, but which, if co-ordinated and unitedly and intelligently directed will undoubtedly do much toward improving the commercial status of pharmacists all over the United States.

We have given the Interstate Retail Druggists' League a hearty support, as we are thoroughly convinced not only of the desirability of carrying out its plans but also of their feasibility and also of the ability and inclination of the present officers to execute them. No matter how able and enthusiastic these leaders may be, to be assured of success they must have the active support of the retail trade.

They do not ask you to help *them*, they ask you to help *yourself*.

Will you do it?

## THE RETURNING OF GOODS FROM A LEGAL STAND- POINT.

THERE is not so very much difference between the legal aspect of returning goods and the moral. If the former were better understood there would be less violation of the latter. The evil is a great, and apparently a growing one. It affects not only the manufacturer, the wholesaler, and the jobber, but the retailer and agent as well, because what the purchaser from the former does, he finds his customers doing with him. Caprice, and not reason, seems to rule the mercantile world.

A contract is a compact, solemn and binding. And a contract of purchase and sale cannot, any more than any other, be broken with impunity. It is a breach of contract and good faith to return, without sufficient justification, goods ordered. Any one can see that a change of mind on the part of the purchaser is no ground for doing such a thing. Nor will raising unreasonable or captious objections authorize it.

The returning of goods once purchased, or ordered, which is practically the same thing if the order be accepted, is only proper, and can be done without incurring legal liability for damages, when the contract made provides for it, as in the case of a "sale or return," or of a "sale upon trial;" when the seller has subsequently agreed to their return; when the seller has failed to furnish what he agreed to, or when, or as, he agreed to; and when the purchaser has become insolvent and it is necessary in order to protect the seller from much greater loss.

A distinction is ever to be kept in mind between absolute and conditional sales. If it is a "sale on trial," the title does not pass until trial and acceptance, actual or implied, although the possession is delivered; being rather a delivery of possession with an option to buy than a sale. If it is a "sale or return," the title passes with the possession, but to be divested if the condition is not performed and the property is returned. If the condition of the sale be that the goods may be returned if they do not prove "satisfactory" to the purchaser, or if the latter is not satisfied with them after trial, the condition must be fully performed; that is, the purchaser must in fact be satisfied or he can return the goods.

Moreover, the courts hold that when goods are manufactured or sold and delivered subject to the approval of the purchaser, it is incumbent upon him, unless he approves, to express disapproval within a reasonable time, or within the time limited by the contract; and the absence of such expression is sufficient evidence of approval, or at least of a waiver of the right to insist upon approval as a condition precedent to a recovery by the seller.

The time within which goods must be returned, if at all, may, however, be lengthened by the conduct of the seller or his agent. He cannot shorten it, as by shipping ahead of the date fixed.

When a purchaser returns or declines to receive property sold him without any legal right to do so, the seller has his choice of either one of three methods to indemnify himself; first, he may store or retain the property for the purchaser, and sue him for the entire purchase price; second, he may sell the goods, acting as an agent for that purpose of the purchaser, and recover the difference between the contract price and the price obtained on such resale or, third, he may keep the property as his own, and recover the difference between the market price at the time and place of delivery, and the contract price. But before the seller proceeds to a resale he should manifest his intention to do so by a preliminary notice to the purchaser that he intends to resell, and will hold him liable by the price obtained.

## DOSAGE AND THE PHARMACOPŒIA.

SOME years ago C. E. CORCORAN presented a paper to the Kansas City Pharmaceutical Association entitled "Some Suggestions on Revision of the Pharmacopœia." Among other things he called attention to the need of some arbitrary guide in Pharmacopœial dosage, and suggested that a system of rules for the guidance of pharmacists and physicians in the administration of remedies be incorporated in future revisions of the Pharmacopœia. Mr. CORCORAN had evidently given the matter long and careful attention and was able to discuss the subject from all sides. So far as our own experience goes we are quite agreed that Mr. CORCORAN's suggestion was a wise and practicable one, and we believe his views are also shared by the majority of the pharmacists of this country. This might be more strongly stated without the slightest risk of exaggerating the facts; but the statement as it stands will answer our purpose very well.

But it seems the Committee of Revision does not look at the matter in the same light, and for ten years more we must get our ideas of average or maximum dosage from the Dispensatories and works on therapeutics, where but little uniformity is to be found. This as pharmacists look at it is lamentable. The Pharmacopœia is their standard as to the purity and strength of preparations and they find it difficult to understand why it should not also be the standard of dosage.

Not a day passes without the need of such a standard being felt by the active dispenser. We are all of us familiar with the disparity which exists between the different authorities regarding the maximum dosage of drugs. Most pharmacists

would probably consider one-twelfth grain a maximum dose of arsenious acid, though aware that some authorities allow larger doses. No careful pharmacist would allow a dose of one-twelfth grain of atropine to pass him in a prescription, and yet the National Dispensatory says that such doses are given in extreme cases. How is the pharmacist to know when the case is an extreme one?

A prescription which we recall as having come under our observation some years ago called for

Morphine sulph. .... gr. xvi  
Aqua. .... ʒ ij  
M. ft. sol.  
Sig.: Teaspoonful as required.

The prescriber was informed of the dangerous character of the prescription but dismissed the dispenser's fears in an airy manner with the information that the dose was intentional and the patient was advised as to the use of the remedy. The physician appeared to be quite satisfied with himself, but the impression left upon the dispenser was that the physician had been guilty of careless prescribing, as the latter should have undoubtedly conveyed some intimation of the unusual character of the case. In Germany the physician who wishes to try an unusual dose is obliged by law to make his intention known by placing certain marks on a prescription.

The subject of dosage is one of great importance not only to physicians and pharmacists but to the public as well. To guard the people against incompetency pharmacy laws have been enacted and State boards of pharmacy in carrying out these laws have examined candidates and granted certificates of competency; but if a knowledge of the largest safe doses of active drugs, or even of ordinary posology, has been required of such candidates we have overlooked the papers in which the questions have appeared. Yet few will take exception to the statement that no one who is ignorant of the largest safe dose of all the active medicinal agents official in the U. S. Pharmacopœia can be considered a competent pharmacist.

Notwithstanding the great excellence of the U. S. Pharmacopœia as compared with the Pharmacopœias of other nations, it is a well recognized fact that the work has no popularity with the working pharmacists of the country. The existence of two works of so substantial a character as the United States and the National Dispensatories may be responsible in some measure for this unpopularity. But to treat these magnificent commentaries and companions to the Pharmacopœia as rival works does not remedy matters, and it is not recommended that the Pharmacopœia should be enlarged a whit beyond its present dimensions.

If it is desired, then, to make the work truly authoritative and popular it would seem only necessary to append to the descriptions of therapeutic agents the average and maximum doses of each. The wish for this has been very generally ex-



pressed at different times by the members of both of the professions of medicine and pharmacy, and the failure of the Committee of Revision to comply has never been satisfactorily explained.

## DO NOT WASTE OPPORTUNITIES.

TO be always the first in the field is a long step toward victory whether in war or commerce. If a physician finds after mentioning one or two new things that he has read about that you already know about them he will come to look upon you as a well posted man. If he finds that you do not know anything about new remedies until he tells you of them he will not place a very high estimate upon your ability as a pharmacist.

The readers of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD get the news of the latest important advances in pharmaceutical science anywhere from two weeks to six months earlier than they could get it from any other pharmaceutical journal in the United States. Too many pharmacists are in the habit of neglecting the opportunity which we place before them of keeping posted up to date. They should remember that it takes comparatively little to either make or mar a reputation. Fall short in two or three instances and you are at once set down by the physician as being behind the times. Whereas, if you happen to be able to answer intelligently the first two or three questions put to you your reputation will be established with that practitioner at least.

Many pharmacists on opening their journals merely glance over the editorials and the market reports and then toss them aside possibly to take up the morning paper. This is an error, for almost every issue of every pharmaceutical journal will be found to contain at least one item likely to prove of practical value and which will well repay the reader for all the time spent in reading the journal.

An unread journal is a wasted opportunity. Do not waste your opportunities.

## HYGIENE IN THE PUBLIC SCHOOLS.

A LITTLE learning is a dangerous thing and if that little be distorted by error of the teacher the results are almost sure to be positively disastrous.

The introduction of physiology as a compulsory study in the public schools has brought out a series of books prepared especially to conform to the provisions of the laws of the various States, in some of which the law requires that a definite proportion of the textbook on physiology, in certain instances as much as one-fourth, shall be devoted to alcohol and tobacco. Many really valuable works on hygiene and physiology are thus shut out from being used and their places filled by books frequently full of the grossest errors of fact. Dr. G. G. GORFF writing

of this aspect of the case in *Science* says:

One also reads that cider drinkers are peculiarly crabbed and cross; that tobacco makes old men ill-natured; that sour milk is unwholesome, cheese indigestible, *pork a meat not fit to eat*, and that bile has the properties of baking soda. Here is a fish story told in the words of a highly commended book: "The Esquimaux who live in Greenland drink one or two quarts of oil, and eat several pounds of candles every day." But see how a story will "grow" even in a scientific textbook. In the next number of the "series," written by the same author, and from the same reliable notes, doubtless, we read: "An Esquimaux consumes about twenty pounds of blubber fat daily, besides drinking several quarts of train oil." What it will be in the next volume, who can tell?

What is really needed in the schools is not so much physiology as hygiene, and to teach this intelligently is necessary that the teachers themselves be first thoroughly grounded in the science before they are put to teaching others.

## TOO MUCH LEGISLATION.

MASSACHUSETTS, like her sister States, is compelled to submit to attempts at each session of the legislature to inflict inimical legislation upon the drug trade. This year is no exception to the rule; in fact, "proposed bills" are more abundant than usual. Just now the trade is wrought up over an act which it is said will prove efficient in "regulating the sale of patent or proprietary medicines," which is as follows:

SECTION 1. Every owner of a patent or proprietary medicine sold or offered for sale within this commonwealth shall, within thirty days after the passage of this act, furnish the state board of health with the formula used in the preparation of the same. The state board of health shall cause all such medicine to be analyzed from time to time, and if the ingredients used in the preparation of the same are found to be injurious to health, shall advertise the name of such medicine and the result of such analysis in such newspapers as said board may deem best, and shall also notify the owners thereof.

SEC. 2. The several formulas furnished the state board of health under the requirements of this act shall not be accessible to the public.

SEC. 3. Any person exposing for sale or selling such medicine after such notice and advertisement shall, upon conviction thereof, be punished by a fine of fifty dollars for the first offense, and by a fine of one hundred dollars for every subsequent offense.

SEC. 4. This act shall take effect upon its passage.

The bill was introduced by Senator CRONIN, who admitted at the recent hearing that it was inspired by an article which he claimed to have read in some magazine. But he failed to enlighten the committee as to the name of the periodical or the trend of the article in question. Among the remonstrants to this enactment was President WILLIAM W. BARTLET of the Massachusetts Druggists' Alliance, who is said to have cross-examined Senator CRONIN so effectually as to display his lack of knowledge of things pharmaceutical, and also to arouse his ire most thoroughly. Other remonstrants, beside President BARTLET, were Hon. GORHAM D. GILMAN, CHARLES P. JAYNES, and FRED. L. CARTER of CARTER, CARTER & KILHAM, who delivered a carefully prepared address. Among other statements made by Mr. CARTER were the following:

The measure before this committee is so far reaching in its possibilities for harm to the druggists of our State that I feel it a duty as a representative of that class to protest against its enactment. It amounts to the utter destruction of all that protection of secrecy which the government has recognized as valuable and proper, taking from citizens the fruit of labor and experiment and making them the prey of rivals. It will pay to consider the far-reaching character of this bill. It includes medicines that are household words. These remedies have a wide use and are highly approved. \* \* \* It will not do to say that these formulas are to be kept secret in the files of the board of health. Are not these files open to the employees of the board? Are these employees different from other men?

Would you consider it safe to entrust your fortune to any board or commission? I do not think you would; then why oblige any other man who has labored for years to obtain a certain result, and who has spent thousands of dollars in making this result known?

Now bear in mind that I am not referring in my remarks entirely to the larger proprietors of patent medicines, but to the large number of retail druggists who have either a cough syrup, pill or other preparation. Are these latter dangerous to the public health? Mr. Carter then referred to the financial ruin which this legislation would entail, and gave estimates as to the number of people employed in the patent medicine industry and capital invested. Manufacturers would leave the State rather than comply with what would be necessary under this act. "Philanthropists do not ask for this bill, neither do those reflectors of popular thought and temper—the newspapers," he said. \* \* \*

The board of health do not want the bill. They know as you know, that they have the authority to analyze any proprietary article, and if they find it dangerous to the public health, they have the power to prosecute without notice any party who sells that article. What more power would you give them? I will also call your attention to the fact that this bill says that the board of health, if they find any articles used in any proprietary preparation injurious to health, no matter if the medicine taken in the dose recommended is perfectly harmless, it (the Board), shall proceed to ruin the proprietor and then notify him of the fact.

Remember there is no redress if the assayer has made a mistake, or has a grudge against any proprietor. Boards of health are human, they are liable to err; but still you would make them judge and jury, and by their edict, without appeal, allow them to destroy a man's business, for which he has spent thousands of dollars and years of toil to maintain.

Would you oblige our citizens to send abroad for medicines? he asked. "They will surely have them, and it is only a question whether our own traders have the profit or strangers. You cannot legislate the conclusions and habits of the people out of existence. You can, however, make our people and industries very uncomfortable, and residence in the State less and less desirable. \* \* \*

I believe the people of our State prefer to be dealt with as reasonable and intelligent beings; that they do not need laws which assume that they are criminally ignorant and careless, that the exercise of a too paternal solicitude embodied in unnecessary enactments will disgust and nauseate the public, instead of impressing the people with a sense of the erudition and wisdom of the representatives of the general court.

THE New York Academy of Medicine, through its Committee on National Quarantine has submitted to Congress a bill to establish a bureau of public health within the Department of the Interior of the United States. The field of labor for such a bureau is wide and of the utmost importance to the welfare of the nation, and every pharmacist should give his support to this measure.

Written for the  
American Druggist and Pharmaceutical Record.

## PARIS PHARMACIES.

BY STERLING HEILIG.

There are 750 pharmacies in Paris. Of these 300 do a starving business; 300 make fair profits; another 100 do quite well; and 50 more make solid fortunes. Of all of these the English pharmacies are the best patronized. The French high world will run to Roberts on the fashionable shop street Rue de la Paix for quinine, which he lets them have for 30 cents a gramme. Two small prescriptions which you ought to get for forty cents apiece will cost a French marquis two dollars and a half at Roberts. Here in the rank of swelledom come two Frenchmen, Midy and Logiers, with Swann and Hogg and Rogers, all three Englishmen, for the next place.

In 1883-4 the pharmacy of Rogers was at the height of its success. About that time a young American druggist, touring in and out of Paris on his patrimony, woke up one morning to discover that he had squandered even the money for his passage home. The *noce* was done. He was obliged to go to work. He stepped inside of Rogers' pharmacy and told his case.

"You are an American chemist?" said the Englishmen.

"Yes."

"Where from?"

"Boston."

"You wish to work?"

"Yes."

"Well, step behind the counter."

The first week Rogers gave him thirty-five francs; the second week he gave him thirty-six francs; and every week he kept on raising him one franc, on up to 70 francs, or fourteen dollars. This is a high salary for a Paris drug-clerk. It would be hard to find to-day.

At that time Rogers' pharmacy was taking 700 francs a day, and all good business, at heavy profits. The young American stayed on for several years. Much of the trade was English. He got familiar use of the French language, which is difficult, and learned the pharmacopoeia, which is easier. All French (?) prescriptions are in Latin, as with us; the metric system was not altogether unfamiliar to him from the start; and he was soon at work upon prescriptions, French and English. He had no examinations to pass at all, because the French law holds the master of a place responsible for all mistakes committed by assistants. On the other hand, he found that it would be impossible for him to ever set up for himself in Paris, which grieved him, for he saw a fortune sure and certain. So, regretfully, he packed off to America. I think this almost ends the story of Americans in Paris who are druggists.

Until the last year every pharmacist (proprietor) in France was required to have his Baccalaureate of Sciences as a preliminary to entering the Ecole de Pharmacie. The Baccalaureate of Sciences takes seven years. The School of Pharmacy of the State (there is no other) takes six years. According as he passed the pharmacy examinations the student was made a first class or a second class pharmacist. A first class pharmacist might alone set up in Paris. This year the law is changed in two particulars. (1) The old distinction of classes is abolished. (2) The Baccalaureate of Sciences is no longer obligatory. In consequence the School of Pharmacy, not in sympathy with the change, has practically raised its standard of final examinations. This year a similar proposition has been agi-

State School of Pharmacy. Apart from this, the Minister of Public Instruction exercises an almost autocratic discretion over the reception and continuation of foreign students working for degrees. Undoubtedly Americans are still *persona grata* with the French, although of late years, it is sad to say, our prestige has run down. But we are still much better looked on than the Prussians, the Italians, and the English.

Should an American pharmacist succeed in getting his degree from the Ecole de Pharmacie (and it is not at all impossible) he might expect to make a solid fortune here in Paris. A few rich English houses are engaged in taking all the special profits in a field whereon American dentistry has won imperishable glory. Roberts now takes in no less than \$250,

on an average, day in day out, throughout the year.

The less legitimate profits of the average Paris pharmacist are of two kinds, first morphine, and second, patent medicines. Concerning patent medicines, the subject of their sale in Europe is so broad and interesting, it would require a letter for itself. But the morphine traffic is as simple in description as it is in practice. According to law, a morphine prescription may be filled but once.

Paris pharmacists continue selling on the old prescription as long as customers have money. The drug is sold at 40 cents a gramme; its use among the educated classes can hardly be exaggerated. It is no uncommon thing to find a young man thirty years of age consuming six grammes every week. Doctors themselves have taken to it strongly, for their pleasure. Artists, journalists and



A PARISIAN PHARMACY—SPRINGTIME CONFIDENCES.

tated for the benefit of budding doctors. It is proposed to substitute, at choice, the "Modern Baccalaureate" for the Latin and Greek. The great lights of the faculty, in general, are bitterly opposed to this. The reason given is that, up to this date at least, the modern language courses have produced no solid results; thus far, they say, only young men trained up in the classics have approved themselves as serious students.

However this may be, it will be seen that pharmacists in France have their own difficulties. Concerning foreigners who wish to set up here, the law knows no diplomas. Every foreign druggist must pass all the courses of the French

actors and the *demi-monde* are given over to it, almost as a class. Prescriptions are so easy to procure; the very jewelers sell syringes made in innocent and fancy shapes, like bracelets. On the other hand, Parisians are moderate in their use of alcohol. Its retail trade is practically free; so even cake shops sell their lady customers small drinks of cognac, liquors and strong Spanish wines. The pharmacists can find no profit there.

To come back to English chemists and their special profits, four reasons are given for their great prosperity in Paris. (1) They are superior to the French in all ideas of business. (2) The fashionable cult among the higher class Parisians for

all things English draws them to these pharmacies just as it draws them to the London tailors. (3) The English and American retail drug trade is in itself extremely precious. (4) The present English houses have a practical monopoly, owing to the fact that they alone have passed the school and taken their degrees. The actual secret I believe to be the first. The Paris pharmacist, like all his race, has no idea of "business" in the English and American sense. On broader lines, the French have always failed to hold their conquests or their colonies. The French lost India, lost Canada, lost Egypt. Wherever they have come in competition with the Anglo Saxon they have suffered. The principle of "business" has no place in their makeup. Let the French druggist make a decent living, and it is all he asks. He will not push his trade. He takes his two hours for lunch; he will not be disturbed by customers while chatting with his friends in his own shop. He treats his custom as enemies, forgets his customers from day to day. All this means nothing. It is only habit. And before the habit changes and the Frenchman learns to hustle, time will have swung around the end of all things and all the druggists of the universe will have been dreaming through long blissfully forgotten ages in their great and last reward.

PARIS, February 16, 1894.

Written for the  
American Druggist and Pharmaceutical Record.

### TABLET TRITURATES.

By FRANK EDEL.

The latest fad with the medical fraternity seems to be tablet triturates. All of the manufacturing firms with but few exceptions are offering a full line of these preparations, and physicians are being actively canvassed by their representatives, with the result that pharmacists are compelled to make new stock additions and extend their lines, until it will be the old story over again—a stock of unsalable tablet triturates to fill up the shelves and increase the volume of dead stock. There can, of course, be no question regarding the value of the triturates as permanent additions to the products of elegant pharmacy, though their vogue is perhaps the result of a fashionable fad. Being efficient and elegant preparations, they undoubtedly merit the confidence of the physician.

In view of the vim and energy which the makers are displaying in pushing these goods, it would seem necessary for pharmacists to make some endeavor to prevent the accumulation of the triturates as dead stock. The writer has given the subject some attention, and while it is not his purpose to go into any extended description of how tablet triturates are made he proposes to state below in general terms indications and directions for their preparation by pharmacists.

In considering these preparations they must be divided into two classes.

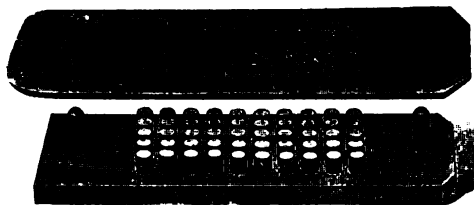
1st. Hypodermic tablets, with a base of pure powdered cane sugar and containing no adhesive agent other than the sugar.

2d. Tablet triturates, having powdered milk sugar as a base and containing such adhesives as may be required.

In preparing hypodermic tablets the number of moistening agents at our disposal is limited. The liquid oftenest used is alcohol; but each substance, as a rule, requires its own excipient; absolute alcohol, ether and chloroform being among the substances most frequently employed. With tablet triturates such dilutions of alcohol should be used as suits each individual case best. But it

should always be the aim of the operator to keep the alcohol used to moisten as strong as possible, since tablets so made dry with greater rapidity than is the case when such precautions are not taken.

A plate has been designed by a firm of druggists' sundries makers, and is in use



TABLET MOLD FOR 50 TABLETS.  
(W. T. & CO.'S NO. 10 MOLD.)

by the writer, for making a hundred hypodermic tablets at one operation. The plate when full holds exactly 25 grains of morphine sulphate and 25 grains of powdered sugar when these are intimately combined. In order then to make tablets of morphine sulphate of  $\frac{1}{4}$ -grain strength it is only necessary to triturate thoroughly 27 grains of morphine sulphate with 27 grains of powdered sugar; then moisten with alcohol and rub the mass into the holes of the plate until no more can be forced in. Remove the excess from top of plate and place the latter on the ejecting plate and force out the tablets by a gentle but steady pressure; then allow the whole to stand until dry. Before rubbing the material into the perforations the plate should first be laid on a smooth pill tile or piece of glass. An excess of material is directed in the formula to facilitate the work.

This method is described merely as an illustration of the ease with which these articles can be made. In making the different tablets it is only necessary to have the materials in a state of impalpable powder and thoroughly triturated. The ingredients must be carefully proportioned so that each perforation shall contain the exact amount of medicines desired. Some experimenting is necessary before accuracy can be reached, but experiments of this kind are simple and inexpensive.

It will be argued by some that the outlay for plates is considerable and does not justify the druggist. To this would say that three sizes of plates are all that are necessary to prepare any combination. The hypodermic plate which the writer uses cost \$3.50 and makes 100 tablets at a time. Plates for making 1-grain triturates can be obtained in hard rubber for \$1.75. These have a capacity for 50. A plate for larger sizes would cost relatively more, but the cost is really too slight for consideration. In taking up this class of work the pharmacist should remember that alcohol is the best excipient for water soluble drugs; for substances soluble in alcohol water will prove the best excipient.

Written for the  
American Druggist and Pharmaceutical Record.

### FELLOWSHIPS IN PHARMACY.

By PROF. EDWARD KREMERS, Ph.D.,  
School of Pharmacy, University of Wisconsin.

I am pleased to see by the editorial article on the subject of pharmaceutical fellowships in the last issue of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD that my suggestions not only meet with your approval but also enlist your support. I hope this matter of fellowships,

at least, will be ripe by the time of the next meeting of the A. P. A.

With regard to your last paragraph I take the liberty to call your attention to the fact that the University of Wisconsin has already taken the step you advocate. Since the last two years we offer a four years' course besides the two years' course which the university has offered for some time. This longer course is on an equal footing as to requirements for admission and general character of studies with the other four years' courses of the university.

Only a year ago this course was announced in the catalogue, but we already have four students. This is a small number, yet if the status of pharmaceutical education of this country is taken into consideration, this small beginning certainly is very encouraging. This course leads to the degree of Bachelor of Science (in Pharmacy) corresponding e.g. to the degree of B. S. (in engineering) or B. S. (general science course) at this university. This is done to avoid a further multiplication of degrees. The master's degree of science (exclusive of engineering) can be obtained after a year of residence as graduate at the university. Three years of graduate study are required for the degree of Ph.D.

With regard to fellowship, I would state that the general university fellowships are open to pharmacy students as well as to others, i.e., on the same terms. The applicant must have a bachelor's degree, must be an excellent student, and possess qualities for original research. The present fellow in pharmaceutical chemistry is a graduate from a classical course and from the two years' course in pharmacy. Among the credentials that he presented as a candidate for the position of fellow was a thesis on "Abeitic Acid," published in the "Proceedings of the A. O. A." of last summer. A perusal of this article will enable one to form an opinion of what is demanded of candidates for such positions at the University of Wisconsin.

It would be desirable to have fellowships for excellent students of the two years' course who have no academic degree, and it will be our endeavor to procure such as early as possible. These statements show that I have not been advocating an idea impossible of fulfillment in the present stage of development of pharmaceutical education. The suggestion is not visionary or hypothetical but something that has stood the test of practical experience.

Written for the  
American Druggist and Pharmaceutical Record.

### Two Elixir Formulas.

By ELBERT E. FISHER,  
Bridgeport, Conn.

#### DETANNATED ELIXIR CALISAYA.

Calisaya in No. 60 powder.....	640 grains
Lime, calcined, in powder.....	1 ounce
Glycerin.....	4 drachms
Hydr chloric acid.....	10 minims
Syrup.....	7 fluid ounces
Oil of orange.....	45 minims
Oil of lemon.....	10 minims
Oil of coriander.....	5 minims
Water.....	q. s.
Alcohol.....	q. s.
Fuller's earth.....	4 drams

Mix the bark and lime intimately; add  $3\frac{1}{2}$  ounces of water, stir well and let dry slowly. Percolate with a mixture of the acid and alcohol, adding sufficient alcohol to bring the bulk up to 4 fluid ounces. To this add the oils and, after shaking thoroughly, the glycerin, syrup and sufficient water to make one pint; finally add the Fuller's earth, shake well and filter.

Each teaspoonful contains the virtues of 5 grains of the bark. The elixir is mixible with iron preparations.

#### ELIXIR OF CALISAYA AND COCA.

Calisaya bark, No. 60 powder...	640 grains
Oil of orange.....	1 dram
Oil of lemon.....	10 minims
Oil of coriander.....	5 minims
Alcohol.....	4 fluid ounces
Hydrochloric acid.....	10 minims
Water.....	3 fluid ounces
Glycerin.....	3 fluid ounces
Fluid extract of coca.....	2 fluid ounces
Syrup, enough to make.....	1 pint

Percolate a mixture of the oils and alcohol, hydrochloric acid, glycerin and water, adding alcohol and water mixed in the above proportions to make the percolate measure 10 fluid ounces. To this percolate add the coca and sufficient syrup to make 16 fluid ounces. Add to this a little Fuller's earth, shake well and filter, adding through the filter sufficient simple elixir to preserve the volume. This elixir is calculated to contain the virtues of 5 grains of calisaya bark and  $7\frac{1}{2}$  grains of coca leaves

Written for the  
American Druggist and Pharmaceutical Record.

### A PROFITABLE LINE FOR PHARMACISTS.

BY A. HAWKEYE-KODAK.

In "Locksley Hall Up to Date" (if it should ever be written) will be found the following lines:

In the Spring the rays actinic exercise a greater strength;  
In the Spring the time exposure dwindles to a lesser length;  
In the Spring a lens is purchased which you know you cannot use,  
And you find yourself bankrupted buying stuff to take new views.

These lines will strike a responsive chord in the heart and purse of the vast army of photographers all over the world, and among these are a great many pharmacists.

Instead of being a source of expense the passion for picture making may, in the case of the pharmacist, be readily turned into a source of income, not directly but indirectly.

W. H. Hostelly of Philadelphia in an interesting contribution to our "Tips on Advertising" last year\* suggested that the pharmacist use the views taken by him as premiums to be given those purchasing more than a certain amount from him each year. As these views would be full of local reminiscences they would be much appreciated by the customers in the smaller towns.

Carrying the idea of utilizing the fad a step further we find pharmacists in a few instances awakening to the fact that they can with propriety and profit carry a stock of photographic appliances and materials. The knowledge of chemistry and of chemical manipulation already possessed by the pharmacist will make it a simple and easy thing for him to learn sufficient of the processes of the photographer to carry them out himself and to explain them to his patrons.

First of all the pharmacist himself or some of his staff should take up photography, if they have not already done so. This can be done with but little outlay of time and money and with great gain of knowledge and pleasure. An expensive outfit is not necessary. For the sake of the example as well as for the pleasure and convenience of the pharmacist in its use I would recommend that for his own use he purchase a hand camera carrying 5 x 7 plates and fitted for the attachment of a roll holder if desired and of good quality.

\* See AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for April 21, 1893, page 209.

Such a camera, with an ordinary lens finished in plain wood, may be had at from \$15 to \$25. A more compact form is the folding hand camera, costing from \$25 to \$60, the price depending largely upon the character of the lens. The price of all the necessary outfit may be summarized as follows:

Hand camera and lens... \$15 to \$60

Tripod..... \$2 to \$5

Developing and printing out-

fit..... \$4 to \$10

Or a total of from \$25 to \$75 or upward, as may be determined on by the purchaser.

If this is purchased with the stock of photographic goods that are to be laid in a discount of about 15 to 20 per cent. can be secured from the list prices.

Before ordering, whether for your own individual use or for a stock, catalogues and discount sheets should be obtained from all the leading dealers together with some rudimentary book of instructions on the subject.

Fortunately the pharmacist already carries in stock many of the chemicals required, and it will be taken for granted in the lists given below that he carries such a stock of chemicals as is found in the average drug store. If he happens to have a supply of any of the chemicals named they may be omitted in making up his stock order.

It might be possible to embark in the business with a stock costing less than \$100 outside of chemicals, but an effort to limit the investment to less than that amount will make it necessary for the pharmacist to depend to a considerable extent upon his special order business, and if a purchaser has to wait until his purchases are ordered from the city he is apt to order himself direct from the wholesaler.

While one or two small, cheap cameras should be embraced in the outfit, it should be borne in mind that the boy who has but 5 or 10 dollars to spend on a camera will not very likely be able to spend as much for plates and materials afterward as will the youth or man who spend from \$15 to \$50 to begin on. Consequently it is better policy, as a rule, to cultivate the sale of the better class of cameras. Besides, the results obtained with the very cheap camera will probably be so poor as to discourage the amateur, and thus lose him to photography.

The use of roll holders and films should be rather discouraged for two very different reasons. The first and most important is that they are less certain in their results than are plates, particularly in the hands of beginners, and even when used by experts they occasionally turn out badly on account of some sort of electrical phenomenon taking place on the surface of the film. The second reason is that being more troublesome to develop than plates and being so convenient to send away there is a greater disposition on the part of the amateur to send his roll to the maker of his camera to have the pictures developed, printed and mounted, and the roll filled and sent back to him. The pharmacist would then get nothing out of it at all after once selling the camera.

The catalogues of dealers always contain a series of cheap "outfits" for developing and for printing and toning. It might be as well for the novice to include a few of these "outfits" in his first order so that he may be able to see just how they are put up. Afterwards he can get up "outfits" of his own, purchasing separately the necessary apparatus, etc., to make them up.

It will be advisable, and in the small towns almost necessary, for the pharmacist to fit up for the use of himself and his patrons a photographic dark room where plates may be developed. This need not entail any serious trouble or expense, the most serious problem generally being the water supply, drainage and light.

If there is no closet supplied with running water which can be appropriated for this purpose, a small tank, something like a large cooler with a faucet, may be put in with a tub in which to catch the waste water.

A very good way in which to avoid the heat entailed by having a light burning in so small a room is to have a gas jet or a lamp placed outside the dark room immediately in front of a window opening into the room. This window may be anywhere from 12 x 14 to 18 x 36 and should be provided with light double sash sliding sideways. Fill one of these sashes with a pane of orange or amber glass and the other with a pane of ruby glass. In this way when both are closed at once there is practically no danger of the light having any actinic power whatever if the correct shades of glass have been selected. This glass might with advantage be included in the first stock order, as not all red and amber glass is non-actinic. Ruby and amber tissue may be stretched in the sash instead of the glass, though the results are not so satisfactory as with the use of glass.

If it is preferred a dark room lantern may be purchased, preferably one fitted for a gas jet if you can get one put into the closet without too great trouble. Such a lantern would cost from \$1 to \$3.

Lastly, do not be too sanguine. While there is money to be made in some sections and under some circumstances it should be borne in mind that in this as in other fields competition is increasing, new things are coming out, old ones shoved to the wall and dead stock thus accumulated.

### Rapid Estimation of Urea.

Dr. E. Riegler proposes to use Millon's reagent in a rapid and easy method for the determination of urea in the following manner: Take a test tube about 140 mm. long by 20 mm. interior diameter. Close with an airtight cork perforated by two holes. In one of these holes place the tube of a funnel provided with a stopcock. In the other perforation place a glass tube through which the test tube may be connected either with a Knop-Wagner nitrometer or with some other apparatus for the collection of gases. The tube of the funnel must reach 15 mm. below the stopper, while the other tube should not extend below the cock at all. Now with a pipette put exactly one Cc. of the solution of urea in the test tube. Then stop up the test tube by turning off the stopcock in the fitter and put the tube into a beaker of the same height as the test tube and containing about a liter of water at the ordinary room temperature. After 5 or 10 minutes adjust the water level in the burette at zero and turn off the glass stopcock carefully and then introduce exactly 2 Cc. and 4 or 5 drops of Millon's reagent into the funnel. The tube of the funnel may be marked at the right point so that it will be unnecessary to measure the reagent each time the operation is repeated.

Read the "trade notes" and the market review every week if you want to keep posted.



Written for the  
*American Druggist and Pharmaceutical Record.*  
**EXTENT TO WHICH PHARMACISTS SHOULD DEVOTE THEIR ATTENTION TO OUTSIDE INTERESTS.**

BY R. J. HARDY,  
Mansfield Valley, Pa

Every man of every profession and trade owes a duty to the public as well as toward his family, his business and himself, and although the pharmacist has not as much spare time as most business men, it is his duty as a citizen to do all in his power to further the interests of the community in which he lives. As to whether this will benefit him as a pharmacist remains to be seen. For instance, he may be chosen to serve as a member of the school board, or of the Town Council or of the Board of Trade. We will take it that he is honest, capable and progressive, and in every respect well suited for the position. He will advocate improvements of various kinds and earnestly devote time and talents to the furtherance of the best interests of the people and probably in a few years will have the satisfaction of seeing a very material improvement in the condition of affairs brought about largely by his efforts. He will have increased his influence in the community, become more widely known, have gained the respect of at least a considerable portion of the people, broadened his own ideas, and have obtained an amount of valuable general knowledge of men and things that otherwise he would not have had. Incidentally he will also of course have his individual share in the benefits that he has helped the community to enjoy. All this is very gratifying for success, public esteem and influence are dear to us all.

But as far as the benefit to him as a pharmacist is concerned it all amounts to simply nothing. It is true that our public spirited pharmacist will have made many friends perhaps, and brought himself more conspicuously before the public. But he will also have made enemies, for no man can occupy a public position and discharge his duties faithfully without making enemies, and one enemy will do more harm to his business than several friends will do good, for the enemy will go out of his way rather than come into his store, while the friends will not make any special effort to throw their trade his way if they can be as well served in a more convenient place. As far as being brought before the public is concerned, \$20. judiciously expended in printers' ink will do more good than a year of faithful and useful public services. The public may appreciate his efforts and even feel grateful, but the gratitude will not take the substantial form of increased trade nor will the fact that he is freely and voluntarily attending to public business be taken as an excuse for his occasional absence from his store. The pharmacist is in a different position from most business men. Every minute of his time may be profitably occupied about his business. When he is not actually engaged in the necessary work of store or laboratory he can be occupied in interesting chemical and pharmaceutical research and time thus spent will be much more profitable to him in his calling than if devoted to gratuitous public service.

In conclusion the writer would recommend every pharmacist who has not been there and who has the opportunity of serving the public by accepting an honorary office, to do so, if he can afford it, if only for a term of a year or two, for the general knowledge he will gain thereby. But let him recollect that such ser-

vices if faithfully discharged will involve more or less self sacrifice and that his business, if not actually injured, will certainly not be benefited. In fact, it may be safely said that the damage to his own interests will be almost in direct proportion to the benefit to the public, for the more time he devotes to public interests the less he has for his own affairs, and the pharmacist who desires the greatest success as such will spend no time on public business and will let politics severely alone except so far as expressing his opinion when called for and voting on election day.

I am aware that this course appears narrow, but it is business and we are looking at it from a business standpoint, and if any pharmacist doubts the truth of these observations let him devote a few years to public service as the writer has suggested, and this will be one of the things he will learn.

### SPRING MEDICINES.

The advent of spring is heralded by various things, for various people. To the young lover it means flowers and moonlight strolls 'mid mossy banks. To the gourmand it means lamb and green peas, and to the pharmacist it means "sarsaparilla" and soda water.

That the spring house cleaning should be accompanied by a spring blood cleaning is an idea firmly fixed in the minds of the public, whatever scientists may say, and shrewd dealers in medicine have fostered and made much of the idea. Therefore whether he will or no the pharmacist must sell "blood purifiers." We therefore append some formulas suitable for this class of trade. The following is taken from an article published in a previous issue of THE AMERICAN DRUGGIST by FERD. LASCAR, Ph.G., and is eminently practical.

That sarsaparilla is inert has often been asserted, still it is well to bow to the generally accepted belief, which never yet has been conclusively disproved, viz., that it is efficacious in blood diseases. Sarsaparilla certainly has strong advocates as a remedy in blood changes traceable to a syphilitic source, and so has sassafras, which also promotes the digestion and acts gently upon the kidneys and upon the skin.

As already stated many botanical drugs have been suggested, but in practice most are found useless. The following formulas will be found to answer the purpose well; they have stood the test of use, and make neat and palatable preparations which require little labor to prepare. The dose in each instance is calculated to be a tablespoonful two or three times a day, but some of the preparations can, as will readily be seen, be put up in more concentrated forms. I also wish to suggest that when it is intended to make up large quantities of them, the formula can conveniently be improved upon by making a fluid extract of the different mechanical drugs mentioned entering into the prescription direct after mixing and grinding.

I.—Potass. bitartr.	3 ss
Potass. bicarb.	3 iiss
Extr. podophyll. fld.	f 3 i
Extr. sarsapar. comp. fld.	f 3 iiss
Tinct. card. comp.	f 3 ii
Glycerin.	f 3 ii
Aque.	q. s. ft. O i

Dissolve the potassium salts in 8 fluid ounces of water by the aid of a gentle heat add the remaining ingredients and set aside over night and filter.

[NOTE.—Large quantities can be made

beautifully clear by running the liquid through a filtering hat of felt.]

II.—Sodium sulpho-vinate.	f 3 i
Syrup sarsap. comp.	f 3 iv
Fluid ext. taraxac.	f 3 iiss
Syr. aurant. cort.	f 3 iiss
Aq. q. s.	O j

Mix and filter.

III.—Sod. et potass. tart.	3 iiss
Extr. sarsapar. fld. comp.	f 3 iiss
Extr. taraxac. fld. ana.	f 3 iiss
Glycerin.	f 3 ii
Syrup, ana.	f 3 i
Spirit gaultheria.	f 3 i
Aq. q. s.	O j

Mix and filter.

IV.—Acid tartar.	f 3 ii
Soda carbon.	f 3 iiss
Syrup sarsap. co.	f 3 i
Extr. podophyll. fld.	f 3 i
Aque.	f 3 xxiv
Glycerin.	q. s. f. xxxvi

Dissolve the solids in the water and when ebullition has ceased add the other ingredients.

V.—(For those who insist upon using iodide of potassium.)

Potass. iodid.	f 3 ii
Syrup sarsap. co.	f 3 viii
Extr. xanthoxyl. fluid.	f 3 i
" sennae, fluid.	f 3 i
" prun. virg., fluid.	f 3 i
Aq. q. s.	O j

Mix and filter.

NOTE.—I have found that the addition of half an ounce of glycerin improves the appearance of the preparation.

VI.—(For those who insist upon the value of trifolium.)

Sod. et potass. tartar.	3 ii
Trifolium, fluid ext.	f 3 iiss
Sarsapar., fluid ext.	f 3 i
Taraxac., fluid ext.	f 3 i
Syr. sarsapa. co.	f 3 i
prun. virg. ana.	f 3 ii
Aque. q. s.	f 3 xxiv

Mix and filter.

The above named prescriptions I submit to the readers of THE AMERICAN DRUGGIST. As already stated, they have each stood trial as to their value, and that they offer no difficulty to prepare I believe will be readily admitted.

The following by E. E. FISHER, Ph.G., which was published in THE PHARMACEUTICAL RECORD some time since, is also very appropriate to the season.

### SARSAPARILLA AND IODIDE OF POTASSIUM.

Sarsaparilla grd.	1 pound
Burdock root.	
Dandelion root.	
Prickly ash bark.	3 ounces
Cham-mille, Roman	
Sassafras bark.	4 ounces
Iodide potassium.	1 ounce av.
Salicylate soda.	1/2 ounce av.
Glycerin.	12 fl. ounce
Alcohol.	1/2 pints
Water, enough to make.	1 gallon

Grind all the herbs to No. 20 powder. Mix the glycerin and alcohol with 2 quarts of water. Macerate 24 hours and percolate. When the liquid has ceased to drop, pour in hot water until a gallon altogether has been percolated. Add the iodide of potash and salicylate soda and dissolve. If not sufficiently dark to suit the eye add caramel 1 fl. ounce.

Bottle this in 12-ounce green panels and label attractively. This will cost, without the carton, about 17 cents a bottle. The carton will cost 2 or 3 cents extra.

Put 2 or 3 dozen on the counter next to the scales, and over them hang a sign reading "Jones' Sarsaparilla, only 50 cents a bottle. Guaranteed to be equal to any made."

Other compounds may be made, almost without limit. A few ideas are subjoined:

### SPRING BITTERS.

Aloes.	6 ounces
Sassafras.	8 ounces
Hops.	2 ounces
Gentian.	4 ounces
Chamomile.	2 ounces
Acetic acid, U. S. P.	1 ounce
Alcohol.	1 quart
Water, q. s.	1 gallon

Mix acid and alcohol with 2 quarts of water. Macerate 24 hours, then percolate, adding hot water to make 1 gallon.



## Pharmaceutical Progress.

**Preparation of Salicylic Acid.**—S. Marasse has patented the following process in Germany (D. R. P., 75,279): Allow carbon dioxide to act on an intimate mixture of phenol and potassa in a closed vessel at an elevated temperature, the potassa being in excess. The salicylic acid formed is separated by precipitation with a mineral acid and subsequently purified.

**New Cheese Ptomaine.**—Charles Le Pierre has demonstrated to the French Academy of Sciences the presence of a new ptomaine which appears in damaged cheese as a well crystallized base of the formula  $C_{11}H_{11}N_2O_4$ . It is bitter, inodorous, slightly acid to phthalein, soluble in alcohol but hardly soluble in water, and gives the usual alkaloidal reactions but does not yield a tannin precipitate. It causes diarrhoea.

**Liquor ammonii ergotinici**, a solution of which one cc. represents three grammes of ergot or three decigrammes of ammonium ergotinate, is claimed to be a solution of the salts of a decomposition product of ergot, which while retaining the full activity of the drug is more permanent and reliable than the preparation made directly from the drug; the dose is 15 to 20 drops; for subcutaneous injection the charge of a Pavraz syringe.—Dr. A. VOSWINKEL, *Pharm. Ztg.*, 1894, 100, through *Am. Jour. Pharm.*

**Spermin.**—Poehl (*Vratch.* No. 3, 1894) draws attention to the beneficial effects of spermin in neurasthenia, anemia, and certain cachexias. The explanation of its action in such conditions may, perhaps, be found in the fact that the substance is a natural ferment of tissue "oxidation processes" which destroy leucamines arising on decomposition of proteids and causing various forms of auto-intoxication. Weber points out (*Ibid.*) that recently he administered spermin in a case of poisoning by oysters with satisfactory results.

**Ammoniacal Mercury Cyanide in Quantitative Analysis.**—F. W. Schmidt (*Ber. d. chem. Ges.* 1894, 27, 225) finding that the methods so far used for converting into oxides metals which have been precipitated as sulphides for the purpose of weighing them are unsatisfactory, proposes the use of an ammoniacal solution of mercury cyanide as leaving no residue whatever on evaporation and incineration. On drying the metallic sulphide with the ammoniacal solution the sulphide is readily converted into a cyanide and mercury sulphide is formed. On incineration the latter is at once driven off and the metallic cyanide converted into an oxide. The process has proved satisfactory with zinc, bismuth, iron and copper.

**Alphol** is the salicylic ether of alpha-naphthol and is isomeric with betol which is the salicylic ether of beta-naphthol. Alphol is obtained by heating a mixture of sodium salicylate, sodium alpha-naphtholate and phosphorochloride to 120–180°. The mass is then freed from the sodium chloride and sodium phosphate which result by washing with water, and is further purified by crystallizing out of alcohol. Alphol is similar to salol in its behavior. It is decomposed in the intestinal tract into salicylic acid and alpha-naphthol and is reported to have yielded good results in the treatment of gonorrhoeal cystitis and of articular rheumatism. Its indications are the same as for the other salicylic acid and naphthol combinations. The dose is given at about 0.50 to 1 gramme or even as high as 2 grammes.—*Phar. Rundschau.*

**Teucrin in Cold Abscesses.**—Kahane (*Wien. med. Presse.* No. 1, 1894) describes the use of teucrin in a case of chronic abscess of the back of more than nine weeks' standing. The abscess cavity extended from the lower cervical vertebrae right down to the sacrum, and gave a marked fluctuation. Teucrin was given in three injections of a gramme each. After each injection there was a rise of temperature and some constitutional disturbance. Three days after the last injection the abscess wall was incised and about 2 liters of pus were evacuated. The abscess then steadily healed, and after about a month the cavity had become almost entirely obliterated, the only trace of it being a sinus about an inch deep, secreting a serous fluid. The tuberculous character of the abscess had disappeared.

**Detection of Lactic and Butyric Acids in the Stomach Contents.**—Professor Saundby of Mason College, Birmingham, England, says: "The test for lactic acid is made by adding to a 1 per cent. solution of carbolic acid a few drops of perchloride of iron, and diluting this, if necessary, with distilled water, until the solution turns a pale amethyst color. On adding a little of the filtered stomach contents the amethyst blue turns to a canary yellow if lactic acid be present. This reaction is given by lactates as well as by lactic acid, and by other substances, such as alcohol; but under the conditions of the experiment these fallacies are of no importance. If the solution turns pale yellow with a reddish or brown luster butyric acid is present; but this, too, is not important, though the fact is of value in the examination of vomited matter, for butyric acid is a product of fermentation in the stomach, and is a very powerful irritant of the gastric mucous membrane.

**Ephedrine** is an alkaloid isolated by Nagai (*Berlin Klin. Woch.* 1887, No. 38) but concerning which nothing has yet been published. Merck isolated the same base, with a melting point for the hydrochlorate of 210° C. in the year 1888 from the *Ephedra vulgaris*, var. *Helvetica*, but on account of lack of material could not prosecute his studies of the alkaloid. The alkaloid is extracted from the alcoholic extract by treating with alkali and ether and is then converted into the hydrochlorate and purified by recrystallization. The alkaloid itself forms a white crystalline mass, boiling at about 255° without decomposition. It is soluble in alcohol and ether and in water, forming with the last a hydrate. The hydrochlorate crystallizes from alcohol in white crystalline needles with a melting point of 214–215° C. and is readily soluble in water.

**Determination of Aconitine.**—Aconite root examined by Keller was found to contain from 0.87 to 1.23 per cent. of alkaloid, as a frothy and partly crystalline mass, when shaken out with ether. For separating aconitine from the amorphous base the mass was washed with small quantities of cold ether, which leaves the aconitine as a white crystalline powder. By evaporating the ether solution of the amorphous base a small portion was obtained in a crystalline state. From 0.282 crude alkaloid 0.239 crystalline aconitine was obtained. By dissolving in 10 Cc. alcohol, adding water until the liquid becomes turbid, and then more alcohol until clear, spontaneous evaporation gives aconitine in colorless prismatic needles, but in smaller quantity. The crude alkaloid evaporated with phosphoric acid gives a rose coloration, pure aconitine does not, and the amorphous base gives a brown color. With concentrated sulphuric acid the crude base gives a pale yellow color,

the pure aconitine remains colorless, and the amorphous base gives a red coloration (*Schweitz. Wochenschr. f. Chem. u. Pharm.* 1894, No. 7).

**Quinine in Pills.**—Kurssteiner prepares quinine in pillular form by mixing intimately ten grammes of quinine sulphate and two each of citric acid, powdered gum, and sugar of milk, then massing with syrup. The pills, when cut, are rolled first in starch and afterward in talc (*Moniteur*, xlv, 1423).

**Toxicity of Thyroid Extract.**—Chantemesse and René Marie describe a case of myxoedema in which injections of thyroid extract, though producing a decided ameliorating effect, in extra strong doses caused vertigo and considerable discomfort, the symptoms being decidedly toxic. A sheep was therefore experimented upon with the extract during several months, and a marked elevation of temperature was noted to follow the injection of any unusually strong dose. The discomfort produced caused the animal to become very irritable, and on several occasions it broke down the walls of the place in which it was confined. When, however, the injections ceased, the animal soon recovered its normal health and condition (*Soc. med. des hôpitaux through Nouv. rem.*, x, 104).

**Solvent Action of Tartrates.**—H. N. Warren finds that the solvent action of Rochelle salt on metallic hydrates and carbonates, exemplified in ferric and cupric compounds, extends to ferrous compounds and to the hydrates and precipitates of zinc, manganese, nickel, cobalt, chromium, and aluminium. The precipitates of barium, strontium, magnesium, and calcium compounds are also to a considerable extent soluble when boiled with a concentrated solution of the tartrate, and both antimony and bismuth oxychlorides, as well as stannic compounds, are entirely dissolved on heating with a sufficient quantity. Cadmium carbonate is practically insoluble in a neutral tartrate solution, and cadmium compounds in solution may thus, by suitable means, be distinguished from cupric salts (*Chem. News*, lxxix, 125).

**Cinchonifine.**—This is the name given by Jungfleisch and Léger to one of several isomers of cinchonine first mentioned by them some years ago (*Pharm. Journ.* [3], xviii, 622). They now state that on several occasions since this base has been confused with cinchonine by different workers, and to prevent further confusion they have been induced to examine the compound again, and now publish their results in detail. Cinchonifine  $C_{17}H_{19}N_2O$  is now described as crystallizing from boiling alcohol in small anhydrous needles, brilliant and colorless. It is insoluble in water, ether, or weak alcohol; only slightly soluble in cold alcohol or chloroform; but soluble in a mixture of the last two solvents. The crystals melt at 273°.6 (corr.), more than eighteen degrees above the melting point of cinchonine, and volatilize unchanged when strongly heated. They are dextrogyre, and the rotatory power augments as the concentration of the alcoholic solution increases. Details are given of a large number of salts of cinchonifine, and the authors conclude by pointing out that Hesse, who in 1890 doubted the existence of the base, last year described under the name "homocinchonine" a compound which presents very great analogies with it (*Comp. rend.*, cxviii, 536).

A new Roumanian Pharmacopoeia has just appeared. It is edited by Professor Maldarescu and MM. Transch and Rossin.

The solubility of exalgin can be materially increased, says P. Cesaris, by addition of 1.1 gr. sodium salicylate to 1 gr. of exalgin. This may be dissolved by warming gently with 10 Cc. of distilled water, the result being a clear solution.

**Antiseptic Mouth-Pearls.**—consisting of thymol, menthol, eucalyptol, vanillin and ethereal oils combined with sugar have been patented in Germany by Radlauer of Berlin. They are said to have a local action only and are recommended for children troubled with catarrhal affections.

**Impurities in Filter Paper.**—Ad. Andreé noting that a number of samples of calomel tested by him showed an excess of chloride, took occasion to examine the filter paper used in his examination and found that it contained both chlorides and starch. The latter would give confusing results in estimating alkaloidal solutions by means of precipitation with iodine solution.

**Ultramarine.**—A patented process of converting green ultramarine into the blue variety proposes to effect this conversion by heating green ultramarine under pressure with a saturated solution of sulphur with sodium sulphide. The same end may be attained by first mixing the green ultramarine with sulphur, and then digesting in a solution of sulphide of sodium.

**Thermometer for High Temperatures.**—Baly and Chorley describe a thermometer which can be employed for all temperatures between  $-8^{\circ}\text{C}$ . and  $850^{\circ}\text{C}$ . The instrument is made on the same principle as the ordinary mercurial thermometer, very hard glass being employed, and an alloy of mercury with potassium and sodium serving for the expanding liquid. This alloy has the advantage of being liquid through a very much greater range of temperature than mercury, its freezing point being  $-8^{\circ}\text{C}$ . and its boiling point  $700^{\circ}\text{C}$ ., whereas mercury freezes at  $-40^{\circ}\text{C}$ . and boils at  $857^{\circ}\text{C}$ . (*Berichte*, xxvii, 470).

**Convolvulin.**—W. Kromer continuing his researches on the convolvulaceous resins, has investigated convolvulin obtained from jalap. He finds that this body splits up on treatment with baryta, even without heat, into convolvulinic and methy-ethyl-acetic acids; the latter, being volatile, appears to have been overlooked by former investigators. Convolvulinic acid is monobasic, and its solution possesses the property of dissolving convolvulin; by hydrolysis it yields convolvulinic acid and a glucose, the nature of which could not be satisfactorily determined. Convolvulinic acid is also monobasic and isomeric, but not identical, with jalapinic and scammonolic acids. Mayer's convolvulinol the author considers to be impure convolvulinic acid (*Pharm. Zeits. Russ.*, xxxiii, 1).

**Insects Attacking Nutmegs.**—J. H. Hart has collected specimens of several species of insects which attack nutmegs while being prepared for the market, and among them W. H. Blandford has identified the following: 1. *Trogosita mauritanica*, Linn.; 2. *Tribolium ferrugineum*, Fabr.; 3. *Carpophilus species*; 4. *Læmophleus sp.*; 5. *Hypothenemus sp.*; 6. *Lasioderma sp.* The second was most common, and the last is possibly *L. testaceum*, which affects Indian cigars injuriously. The insects appear to have been imported into Trinidad in the corn and lined meal employed as horse and cattle food. As a preventive the nutmegs are now sprinkled in the drying room, and also

when packed for market, with quicklime in powder. A certain means of destroying the insects is to expose the nutmegs in air tight receptacles to the vapor of carbon disulphide (*Trinidad Bot. Dept. Circular Note*).

**Crystallization of Cellulose.**—E Gilson finds that when sections of cellular tissue are kept in contact for a time with Schweitzer's reagent (cuprammonia), then washed successively with ammonia and water, so that the copper compound is dissolved gradually and the cellulose slowly precipitated, the latter forms nodular or arborescent crystals in the interior of the cells. The crystals are insoluble in dilute acids and alkalis, but dissolve in concentrated sulphuric acid, and behave generally as cellulose. Starch must be completely removed before applying the reagent, and certain other precautions are also found to be necessary. Two distinct substances appear to be present in most cellulose membranes, one only of which is crystalline. The other is amorphous, and gives no coloration with iodine (*Chem. Centr.*, through *Journ. Chem. Soc.*, lxvi, 107).

**Cathartic Acid.**—Jensz prepares this acid by evaporating an infusion of senna in vacuo, mixing the residual extract with an equal volume of alcohol, shaking well and leaving the mixture to settle for twelve hours. After decanting off the liquid, the deposit is again shaken with alcohol, and finally pressed. The filtered liquids are then precipitated with lead acetate, the precipitate separated and well washed by kneading with water until the washings pass away clear. The partially dried precipitate is mixed with alcohol and decomposed with sulphureted hydrogen, excess of the gas driven off by passing a stream of carbonic acid or air through the liquid, then heating the whole in a vessel fitted with a reflux condenser, filtering to separate lead sulphide, and washing with alcohol. The clear liquid is then mixed with ether as long as a pale yellow deposit is produced, which is allowed to settle. After pouring off the ethereal liquid, the brown deposit on the sides of the vessel is washed with ether or strong alcohol, dissolved in a very small quantity of 80 per cent. alcohol, and evaporated at a temperature not exceeding  $50^{\circ}\text{C}$ . The preparation so obtained amounts to from 0.8 to 0.75 per cent., and it is sufficiently pure for medicinal use. Cathartic acid is described as having the characters of a glucoside, and a composition represented by the formula  $\text{C}_{12}\text{H}_{14}\text{NO}_{11}$ . It is soluble in hot water and alcohol. The dose is given as 0.10 to 0.15 gramme (*Pharm. Zeitsch. für Russland*, xxxii, 744).

**Decomposition of Ethylene.**—V. B. Lewes reports to the Royal Society that the textbook equations representing what occurs when ethylene is decomposed by heat are probably incorrect. He finds that when the gas is passed through a heated tube no change is observable until a temperature of  $800^{\circ}\text{C}$ . is reached. Traces of acetylene are then observed, and this compound increases in quantity between  $800^{\circ}$  and  $900^{\circ}$ , large quantities of methane being also produced, together with liquid products—



Hydrogen begins to appear and carbon is deposited near  $1200^{\circ}$ , the formation of oil decreasing until near  $1500^{\circ}$ , when the decomposition of the ethylene is practically complete, the products of decomposition being chiefly hydrogen, with some undecomposed methane and deposited carbon—

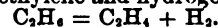


Between the primary and final decompo-

sitions represented by the above equations a large number of interactions occur, being due to the polymerisation of the acetylene formed from the ethylene, and also from the methane as follows:



Further heating of the decomposition products of ethylene results in the formation of ethane. This is decomposed, at  $900^{\circ}$ , into ethylene and hydrogen, thus:



**Active Principles of the Papayaceæ.**—L. Guignard, who has shown that plants in certain families allied to the Cruciferae, also resemble members of the latter order in containing similar active principles and yielding analogous volatile oils, now shows that the Papayaceæ, which have no botanical affinities with plants in the previously examined orders, yet resemble them as regards their active constituents and properties. Thus, *Carica papaya*, L., contains the ferment myrosin, and the glucoside, potassium myronate, which combine in the presence of water to form the volatile oil, as in the earlier instances. The root is richer in the two principles than the other vegetative organs, the stem being very poor in glucoside. The leaves, however, contain proportionately more of the ferment than the root. From two other species, *C. condinamarcensis*, Hook. fil., and *Vasconcellea quercifolia*, Saint Hil., the quantity of essential oil obtained was relatively much less than from *C. papaya*. The organs of the plants poorest in myrosin were found to be richest in latex, containing the vegetable trypsin—papain, but no constituent of the latex takes part in the formation of volatile oil. The myrosin is found in certain parenchymatous cells, and as regards the localization of this ferment the seeds of *C. papaya* present a curious analogy with certain cruciferous seeds. The glucoside, on the other hand, as in the Capparidaceæ, exists alone in the seed albumin, though associated with a small proportion of ferment in the embryo (*Comp. rend.*, cxviii, 545).

**Determination of the Iodine Number.**—Dr. R. Seeliger suggests the following method for the purpose of dispensing with the use of mercuric chloride. Chlorine is passed into a solution of 10 grammes iodine in 200 Cc. alcohol for about ten minutes, when the iodine is converted almost suddenly into trichloride. Excess of chlorine is then driven off on the water-bath and the cooled solution made up to 250 Cc. On adding to this solution potassium iodide (1 to 5) a quantity of iodine equivalent to the chlorine is liberated, and it can be determined with a decinormal solution of thiosulphate. In carrying out an experiment with oleic acid, for example, 0.8 gramme dissolved in alcohol mixed with some chloroform is added to 10 Cc. of the iodine trichloride solution diluted with 50 Cc. of alcohol, and the whole left to stand for twenty-four hours. Then the potassium iodide solution (10 Cc.) is added, and after one hour the iodine liberated is determined with decinormal solution of thiosulphate, after having made a similar determination without adding oleic acid. The difference between the two results gives the iodine number. If fat is separated on adding the potassium iodide solution some chloroform is to be added, or an alcoholic solution of potassium iodide may be used. As hydrochloric acid and other chlorinated products may be formed by passing chlorine into alcohol, Seeliger recommends dissolving the iodine in carbon tetrachloride, and afterwards making up to 250 Cc. with alcohol or ether (*Pharm. Centralh.*, xxv, No. 7.)

### Spices and Condiments.

Part 2 of Bulletin No. 13 of the U. S. Department of Agriculture, Division of Chemistry, is devoted to a popular exposition of the origin of spices and the means employed for their adulteration, and contains as well an extended technical discussion of the subject and of the results of analysis both microscopical and chemical, and the methods which have been proposed by recent authorities for the detection of sophistication. The report is the work of Clifford Richardson and is certainly a masterful performance. We print below the sections relating to the more commonly used spices and condiments. The table of contaminations which begins the excerpt here given will furnish an idea of the extent to which the ingenuity of spice mixers has gone.

TABLE OF SPICES AND ADULTERANTS.

Spices.	Adulterants.
Al spice.....	Spent cloves, clove stems, cracker dust, ground shells or charcoal, mineral color yellow corn.
Cayenne.....	Rice flour, salt and ship stuff, yellow corn, turmeric, and mineral red.
Cassia.....	Ground shells and crackers, turmeric, minerals.
Cinnamon..	Cassia, peas, starch, mustard hulls, turmeric, minerals, cracker dust, burnt shells or charcoal.
Cloves.....	Spent cloves, clove stems, minerals, all-spice, roasted shells, wheat flour, peas.
Ginger.....	Cereals, turmeric, mustard hulls, cayenne, peas.
Mace.....	Cereals or starch, buckwheat, wild mace.
Nutmeg....	Cereals or starch, wild nutmeg.
Pepper.....	Refuse of all sorts, pepper dust, ground crackers, or ship stuff; rice, mustard hulls, charcoal, cocoanut shells, cayenne, beans, bran, yellow corn.
Mustard..	Cereals and starch, turmeric, peas, yellow corn meal, ginger, gypsum.

The materials in italics have been identified in spices examined in the laboratory of this division, but some of the commoner adulterants have not been found. Considering the spices individually there are certain peculiarities, as they are met with pure and in the trade, which should not be overlooked.

#### MUSTARD.

Mustard, as sold in the ground state, should be the farina or flour of the black or white mustard seed—that is to say, the flour from the interior of the seed bolted or separated from the hulls. The two kinds of seed, although derived from plants of the same genus, are somewhat different in their chemical composition. The black seed is much the most pungent; and develops, on mixing with water, a volatile oil, which gives this condiment its penetrating character. There is also present in the seed a complicated organic substance of a bitter nature, to which is due some of the peculiar flavor, and while the white seed forms no volatile oil with water, it contains more of the bitter substance. It is, therefore, very common to mix the two in grinding. The sources of the seed are various. In our markets at present there are quoted California black and white, Dutch, Trieste black, and English—the last being the most valuable.

In the manufacture of the seed into flour for the market two customs have arisen which change the nature of the original substance, and therefore would commonly come under the head of adulteration. One is extremely old, the addition of wheat flour for the purpose of making the condiment keep better. This necessitates the restoration of the yellow color by turmeric, or other dye stuff. These diluents are harmless, as a rule, but there seems to be no reason for their use, and it is gradually becoming commoner to find mustard free from them in English brands.

The other custom is the abstraction of the fixed oil by pressure before grinding the seed. The percentage of this oil is over 30. It adds nothing to the flavor of the mustard, probably injures its keeping qualities, makes the seed more difficult to mill, and its removal is therefore a benefit. It is a nearly universal custom at the present day in this country, and is not considered as fraudulent by the Canadian analysts.

Falsifications of mustard other than those mentioned are not common, although gypsum has been found in low-grade mustard and several other adulterants, among them ginger of low grade. The hulls bolted from the flour in the process of manufacture are preserved and form the basis of the adulteration of many other spices.

#### PEPPER, BLACK AND WHITE

Pepper is more in demand than any other spice, and in consequence is more adulterated. Its appearance in the ground form, especially of the black, is such as to make it possible to use all sorts of refuse, for this purpose, and almost everything that has been used as an adulterant has been found in pepper. White pepper, which is simply the black deprived of its outer black coats, is, of course, less easily falsified; but in France is diluted to an immense extent with ground olive stones, which bear a striking resemblance. Among the samples from Washington grocers pepper sweepings—that is, husks and dirt—rice or corn, and mustard hulls were the commonest admixtures. Sand is said to be very commonly added abroad, but has not been met with here. In Canada and New York ground cocoanut shells are a cheap source of adulteration, but they have not extended so far south.

Specimens from Baltimore mills of very low quality goods were found to contain but little pepper, and that of the worst quality, being made up of cracker dust, yellow corn, cayenne, and charcoal in so disgraceful a way as to be visible to the unassisted eye on close examination.

The quality of a ground pepper can be told by an expert from its weight and color, and on examination with a lens of low magnifying power. The particles are not coarsely ground, and it is not difficult to pick out pieces of husk, yellow corn, and rice, and, if necessary, a more careful investigation under a microscope of higher power will serve for confirmation. Black pepper, in our experience, is much more liable to adulteration than white, although it is perfectly easy to dilute the latter with broken rice or cracker dust, which are inexpensive. All these materials, fortunately, owing to the grossness of the adulteration, are readily recognized, and there is hardly the necessity for recourse to chemical analysis. There has been, however, considerable investigation in this direction, so that there are means of confirming the optical examination which are of great value. Determination of the amount of starch is one of the methods upon which some reliance can be placed; for if under the microscope foreign starch is not detected, then the addition of "P. D." or other starch free adulterants will diminish the percentage found, and the reverse. In this way, too, one is able to arrive at an approximate conclusion as to the proportion of adulterants added, which can only be estimated within wide limits under the microscope.

In spite of the immense amount of adulteration, it is possible, from the best shops to obtain pure ground peppers, but it is at the same time safer with a family spice mill to grind the whole berries as they are needed. The sources of our

pepper supply are Tellicherry on the west coast of Hindostan, which is graded high and Penang and Singapore for the East. Sumatra, Java, etc. The importations are principally through London and not direct. The supply of ground pepper from England will usually be found more pure than our own brands, and at the same time is naturally more expensive.

#### CAYENNE OR RED PEPPER.

This condiment should consist of the ground pods of any of several species of *Capsicum*, known as chilies or peppers. It is said to have been adulterated with many substances, brick dust, red lead, and coloring matters; but this has only been found to be the case in two cheap Baltimore cayennes, while in Washington only rice has been detected, but that quite frequently. Inferior material is to doubt often ground, but the small value of the pods and the small quantity consumed does not tend to increase adulteration.

#### GINGER.

Ginger is the root, or, technically, rhizome, of a plant somewhat similar in appearance to our iris and flag. It is grown in various parts of the world and prepared with great care and great carelessness, being at times scraped and bleached, at others simply dried in any condition, so that there is an immense number of varieties and qualities to be found in the market. They all, however, retain sufficiently the marked peculiarities of the starchy fibrous root to make the detection of adulterants easy. The common ones are the addition of wheat flour or some starch as a diluent, the coloring with turmeric to suit a popular fancy for gingerbread or of spent material which has been used in making tincture. Mustard hulls and cayenne are also found in some cases but have seldom been detected here. They are added to give pungency and make up for the addition of flour. Their detection is easy. The sources of our supply are Jamaica and the West Indies, Cochin China, Africa and India. Jamaica is the best and most carefully prepared.

#### CLOVES.

The flower buds of the clove tree carefully picked and dried constitute the spice known by that name. Their valuable properties are due to the volatile oil which they contain, the best having as much as 16 per cent.

The removal of this oil is so very easy that it is the commonest method of deception to do so before grinding the spice and to then dispose of it as pure. We have ready means of determining the loss loss chemically, but the microscope gives no indications. The addition of the cheaper clove stems is also practiced, as they cost but 5 cents when the buds cost 27. The microscope reveals their presence by certain cells which they contain which are absent in the buds.

Pimento is sometimes substituted in part or entirely, as it has a clovelike flavor but only 4 or 5 per cent. of volatile oil. It is worth less than one-fifth the price of cloves. Its chemical composition and its structure, that of a berry, reveals its presence. The addition of the coarser adulterants, mineral matter, cocoanut shells, flour, peas, and the like, have only been observed in two instances, but no doubt frequently occur, as has been found in Canada.

The sources of our supply are the East Indies (Amboyna), African (Zanzibar), and American, ranking in value in the order named. Cloves should, if possible, be always purchased whole, as they deteriorate less readily in that form.

## CINNAMON AND CASSIA.

These spices are the barks of several species of the genus *Cinnamomum*, the true cinnamon being a native of Ceylon, where it is largely cultivated and the cassias being derived from several other species growing in China, India, and the East Indies. Cinnamon as it reaches the market is very thin, the outer and inner coats of the bark having been removed. Cassia on the other hand is thick, as it consists of the entire bark and can be distinguished by its retaining its natural outer surface. Cinnamon is by far more valuable than the cassia, as there is a smaller supply and intrinsically it contains a much greater proportion of volatile oil and that of higher and more delicate aroma. In consequence cassia is largely substituted for cinnamon, and in fact not a particle of ground cinnamon can be found in the market. It can be found in the whole condition in good quality only in drug stores. Cassia exists in many forms and qualities, and sells at wholesale at from 7 to 40 cents a pound. That known as Saigon is the best, and that exported from Batavia the poorest. Cassia buds also hold a small place in the market.

The detection of the substitution of cassia for cinnamon, since the barks are of trees of the same species, is more difficult than is usually the case and may prove troublesome to a novice. The presence of more woody fiber in the latter with the aid of chemical analysis serves, however, as a reliable distinction. In the samples which have come into our hands, not a particle of material labeled ground cinnamon proved to be anything other than cassia. The spice millers appeared, however, to be satisfied to stop at this point and in only one case was there addition of cheap stuff to the cassia. When added there is no difficulty in detecting it, as has been done here and in Canada, where peas, starch, ground shells, and crackers have been found in powder labeled both cassia and cinnamon.

The barks can, in most cases, and especially the cinnamon, be used nearly as well in the whole condition and should at least be so purchased and then ground. A slight acquaintance with the appearance of the different qualities will teach one the proper selection to make.

## NUTMEG AND MACE.

These spices are different portions of the fruit of a tree known as the nutmeg tree, *Myristica fragrans*, the nutmeg being the inner kernel and the mace one of the outer coats or arillus. The tree grows principally on the Banda Islands and the spices reach us through London. They can always be obtained in their original condition and should be so purchased. When ground they are mixed with diluents of various descriptions, principally cereals and their refuse, which are easily detected.

Owing to the infrequency of the sale of the powdered nutmeg and mace, their adulteration has attracted but little attention.

## Deodorizing Recovered Alcohol.\*

BY EDWARD A. KADEL.

Here is a method that, with slight modifications, gives splendid results in my hands. I have not as yet found an alcohol so vile that I failed to purify it so as to render it fit for employment in general manufacturing.

The alcohol is first treated with caustic

\*Indiana Pharmacist.

soda; for alcohol recovered from drugs like arnica, buchu, cubeb, etc., one ounce to each gallon is employed. After setting from two to five days it is distilled by water bath or steam jacket kettle. The alcohol first passing over must be returned to the still. This is continued until the odor is either changed or lost. Usually this distillation leaves an empyreumatic and sometimes a soap odor to the alcohol. It is then redistilled with potassium permanganate; the quantity to be used can be determined by experience alone, alcohol recovered from the same drug at different processes requiring different proportions; usually one to four drams to a gallon is employed. Thus treated it is generally clean enough for re-employment for manufacturing purposes, seldom producing any coloration with hydric sulphate. If further purifying is desired again distill with the permanganate and filter through animal charcoal, but unless the charcoal is freshly prepared this is useless. If I have not fresh charcoal, I add a small quantity of distilled water and distill again after second treatment with the permanganate.

From the standpoint of economy this process certainly is unobjectionable. I employ a five gallon still of my own construction, a fair average of three gallons an hour by water bath being its working capacity. Time, gas and material I find is fully compensated for, and in laboratories equipped with steam the cost of purifying is reduced to a minimum. The process requires no attention after it is once under way; I seldom go near it after complete automatic action of the still has been secured.

## A New Salt of Silver

The *Zeitschrift für Hygiene und Infektionskrankheiten* (vol. xxi., 1894) contains a report entitled "Ueber den Desinfektionswerth des Aethylenediaminesilberphosphats und Aethylenediaminkresols" by Dr. Jean Schaeffer, assistant physician at the University Dermatological Clinic of Breslau. These elaborate series of experiments have been conducted for a considerable length of time under the direction of Professor Neisser at Breslau.

The experimental investigation and clinical experience of the last few years have tended to heighten the esteem in which the antiseptic action of silver solutions is held. Numerous researches prove the very great germicidal properties of silver compounds, which under some conditions surpass even those of corrosive sublimate, and the successful employment that silver nitrate has found in medicinal practice fully confirms the favorable results of experiment.

In the treatment of gonorrhoea dilute silver solutions have indeed been demonstrated superior to other remedies and have supplanted most. A drawback of no mean significance has, however, hitherto marked the therapeutical employment of silver nitrate. From the most recent investigations it is known that the gonococci, after a comparatively short time, penetrate deep into the epithelium. Consequently it is an absolute necessity that the remedy employed should not only have a superficial action, but should be able to reach and kill the disease germs in the deeper tissues. These conditions are only partially fulfilled by silver nitrate. Its action is comparatively superficial. It forms insoluble compounds with sodium chloride and albuminoid substances, which not only remain on the surface themselves but bar the way into the interior to the rest of the solution.

A demand has, therefore, been felt for a silver solution, which, while retaining the energetic bactericidal properties of silver nitrate, shall not form insoluble compounds with chlorides and albuminoids. This want has been supplied by the preparation of an ethylenediamine silver phosphate solution. The specific value claimed for this new salt is based upon the observation that the base ethylenediamine has a very good corrosive action and that on addition of the alkaline silver solution to a sodium chloride or albuminous liquid no precipitate, but only a faint opalescence, is formed. The phosphate and not the nitrate has been selected to avoid any possible reaction of the ethylenediamine nitrate that would be formed.

Ethylenediamine silver phosphate is a colorless, clear liquid which contains twice as much ethylenediamine as silver phosphate; the alkaline reaction of the solution is dependent upon the amount of ethylenediamine present, and 100 Cc. of a 10 per cent. solution is equivalent to 333 Cc. normal soda solution. Like all silver salts the preparation must be preserved in the dark as it is extremely susceptible to change.

Ethylenediamine silver phosphate is being introduced to the medical and pharmaceutical professions in the United States by Schering & Glatz, importers of drugs and chemicals, 55 Maiden lane, New York, to whom all applications for example of literature on the newer remedies should be made.

## Examination of Commercial Preparations of Phosphates of Iron and Alkaloids.\*

BY MILTON F. SCHAAK.

In order to ascertain by analysis the composition of these commercial preparations this work was undertaken. In order to make the quantitative determination of important constituents as rapidly as possible, and with sufficient accuracy, the following process was devised and followed.

Five to ten grams were taken, diluted with water, heated to expel alcohol, put into a separating funnel, ammonium citrate added (when needed), made alkaline with sodium hydrate and shaken with 3 or 4 successive portions of chloroform until all the alkaloids were removed. The combined chloroform solutions were allowed to evaporate, and the residue dried at 100° C. for one hour, and weighed as total alkaloids.

A portion of this alkaloidal residue indicated quinine by the fluorescence of the acid solution, the thalleoquin reaction, and the formation of a precipitate by ammonia water, soluble in excess.

Strychnine was indicated by moistening a film of the residue with H<sub>2</sub>SO<sub>4</sub> and adding a minute fragment of potassium dichromate, when a fading purple color resulted.

The liquid from which the alkaloids had been removed, after being heated to expel remaining chloroform, was treated with a little ammonium chloride, and ammonium sulphide added in excess, the bottle completely filled, corked and set aside until the supernatant liquid acquired a yellow color without a tinge of green.

The precipitate collected upon a filter and washed with dilute ammonium sulphide, with precautions against oxidation, was dissolved in dilute HCl, the solution heated, filtered and thoroughly oxidized with small quantities of nitric acid.

\* American Journal of Pharmacy.



This ferric solution was strongly acidulated with hydrochloric acid and a little copper sulphate and potassium sulphocyanate added.

Decinormal volumetric solution of sodium hyposulphite was now run in until the red color of the liquid was discharged, a little starch paste added and the excess of sodium hyposulphite determined by a corresponding strength solution of iodine.

The iron was calculated from the amount of sodium hyposulphite used.

The phosphoric acid was precipitated as ammonium magnesium phosphate, by adding magnesia mixture to the ammoniacal liquid from which the iron had been removed (the ammonium sulphide not interfering); after the precipitate had thoroughly separated it was washed with ammoniacal water and dissolved in a small quantity of acetic acid and sodium or potassium hydrate added, allowing the solution to remain slightly acid.

After the addition of a few drops of cochineal test solution, heat was applied and volumetric solution of uranium acetate run into the hot liquid; until a small excess of uranium producing a green color with the cochineal indicated the end of the reaction.

The uranium solution having previously been standardized under similar conditions, the phosphoric anhydride was calculated from the amount used.

Several samples of the scale phosphate of iron, treated according to the above, gave an average of 18.2 per cent. iron and 17 per cent. phosphoric anhydride.

The following table shows the specific gravity and average result of several analyses of each preparation of elixir phosphate of iron, quinine and strychnine; syrup phosphate iron, quinine and strychnine, and several chemical foods.

All the elixirs claimed to contain 2 grains phosphate of iron, 1 grain salt of quinine and  $\frac{1}{16}$  to  $\frac{1}{8}$  grain strychnine.

Number.	Specific Gravity.	Per Cent. Fe.	Per Cent. $P_2O_5$ .	Total Alkaloids
1	1.17	.39	.52	1.33
2	1.09	.32	.20	.79
3	1.06	.26	.22	.30
4	1.12	.40	.15	1.80
5	1.06	.37	.45	.20
6	1.06	.37	.43	.60
7	1.09	.17	.29	.70
8	1.14	.45	trace	1.35
9	1.06	.36	trace	1.16
10	1.80	.034	3.00	.44
11	1.84	.31	.27	—
12	1.18	.34	.25	—

No. 1, made by the writer, contained 2 grains scale phosphate of iron, 1 grain quinine sulphate and  $\frac{1}{16}$  gr. strychnine to a fluid drachm.

This preparation formed a precipitate when mixed with water, and, on being exposed to light, gradually became darkened in color.

No. 2, a commercial preparation labeled to contain same as above, was of a light greenish color, and clouded slightly on addition of water.

Nos. 3, 4, 5 were light greenish color and mixed with water without precipitation. No. 4 was stated to contain half the amount of iron as citro-chloride, and the alkaloid quinine.

Nos. 6 and 7 were dark colored, and did not precipitate when mixed with water.

Nos. 8 and 9, made by prominent manufacturers, are considered standard preparations. They did not precipitate on standing, and were miscible with water; 9 was a beautiful elixir of bright green color and enjoys perhaps a larger sale than any other; it was labeled to contain the full quantities of ingredients.

No. 10 was a syrup, and labeled to con-

tain 1 grain phosphate of iron,  $\frac{1}{4}$  grain muriate of quinine, other phosphate and free phosphoric acid to a fluid drachm.

Nos. 11 and 12 were chemical food or syrup of phosphates, and should contain 1 gr. phosphate of iron to each fluid drachm.

### Powdered Medicinal Extracts.\*

By WILLIAM B. THOMPSON.

Solid extracts of vegetable drugs to be of requisite quality should possess, in a marked degree, the distinguishing characteristics of the material of which they are made. Each should present a distinctive individuality and in those substances in which the active constituent is alkaloidal, precise assay should show a full average percentage. Odor and taste should be wholly preserved, and that excess of inert matter, usually denominated "extractive" and largely predominating in this class of articles as usually found, should be avoided or materially diminished by skill of process. The choice of a proper solvent or menstruum for the active properties of a drug involves experience and extended observation. Error in, or indifference to this essential is quite likely to result in a minimum of active constituent loaded with a maximum of "extractive." Both physician and pharmacist will realize that this means a gain in bulk and weight, and thereby a commercial advantage, but the therapeutic purpose and object are lessened to a culpable degree. The initial point, of course, in this as in all other classes of finished pharmaceutical products, is the selection of good, sound drugs—a quality of which, better than the average, is not too good, and often not good enough. Then the process in all its detail of reduction from liquid to solid, should be carried from beginning to full completion, within the vacuum still or vessel, at such controlled or regulated temperature that heat can in no wise prove a destructive element. As complete an exclusion of surrounding atmosphere as is possible precludes that tendency which, it is known, induces a change in the state of single and associated alkaloids, and disturbs that nice adjustment in which these exist in a native or natural condition. With the application of a proper degree of skill and the scrupulous pains which such important agents as medicinal extracts should always receive at the hands of the manufacturer, it is believed that this class of products can be made to present such unusual features of excellence as are not generally met with in commerce.

Did the conditions of demand and use justify entering upon the preparation a right, of solid extracts, among the other operations of the dispensing pharmacist, and could the necessary apparatus be satisfactorily applied, the character of products would prove quite a revelation in knowledge to the uninitiated—that is to say, that the attainment of complete and perfect products result in a class of preparations so totally unlike what we are accustomed to see as to offer suggestive ideas to the novice and the student. We should be enabled to learn much more than the limited knowledge we now have of the substance known as "vegetable extractive." Of course, we are aware that those active and potent principles of vegetable substances are intimately associated with and closely involved with the juice, sap and plant composite. But we must acquire a knowledge of how these can be separated

from each other without injury to each, and must learn, moreover, that the material from vegetable structure and organization, which yields to the solvent action of liquids, varies greatly under different circumstances in kind, quality and amount of bulk. This clearly points to a need of more knowledge of the character, proportion and quality of menstruum which should be employed. Percolation with warm and cold solvents; the use of that percentage of spirit which would solve neither sugar nor gum, a prolonged action of aqueous menstruum inducing a certain chemical union of starch and tannin; the formation and character of "apotheme" that almost inevitable concomitant of vegetable infusions; the changes of color which occur in the course of evaporation or concentration; existing conditions of atmosphere favorable or unfavorable to drying and powdering—these are a few of the numerous agencies which merit study and attention, and which, if not bestowed at times during the progressive stages of manipulation, will result in unsatisfactory and, it may be, indifferent products.

The specimens here presented in illustration of the statements made show marked peculiarities, and they are each dissimilar, yet are wholly natural products, and may be said to represent advanced ideas, certainly they do represent good products, and are worthy of close attention. The containers or bottles are purposely large; this is intended to give a mobility to the powders and opposes an existing idea that such substances should be compactly bottled to exclude the air.

**Odor of Benzoic Acid.**—J. Passy, continuing his work on the limits of perceptibility of odors (*Pharm. Journ.*, [3], xxiii., 967), points out that, while stearic acid is odorless, and its aldehyde, alcohol, and ethers the same, in the case of benzoic acid and its associated compounds the acid alone is odorless, and this only when pure and in the crystalline form. If diluted with any medium the characteristic odor at once reveals itself, as was proved experimentally when the acid was diffused in aqueous vapor or an aqueous solution warmed. A similar result was produced by the spontaneous evaporation of a one per cent. alcoholic solution on a watch glass or a piece of filter paper. Arohnsohn has shown that, though the odors cannot be perceived when solutions of odorous substances in pure water are introduced into the nostrils, this is due to the action of the water on the olfactory cells, and may be overcome by dissolving 0.6 per cent. of sodium chloride in the liquid and warming the latter to the temperature of the body. Under similar conditions the otherwise inodorous benzoic acid, in the proportion of one part in one thousand, yielded a clearly perceptible odor. Identical results to the above were obtained with cinnamic acid. Passy considers, therefore, that these compounds may fairly be regarded as odorous, as much so as vanillin, coumarin, and other compounds of the aromatic series, which are odorless below the temperature at which they volatilize. He concludes also that the so-called inodorous bodies may be divided into two categories: 1. Those which are, for normal human beings, beyond the limits of perceptibility by the sense of smell, such as stearic and other fatty acids, beyond the fourteenth term. 2. Those which may, under ordinary conditions, have no perceptible odor, such as benzoic and cinnamic acids, etc. (*Compend.*, cxviii., 481).

\* *American Journal of Pharmacy.*



## The New Swiss Pharmacopœia.

BY C. JEHL.\*

In 1865 the Swiss Society of Pharmacists published for the first time a "Pharmacopœia Helvetica" in the Latin language. This work, a second edition of which was published in 1872, and a supplement to the latter in 1876, was not official, but optional, since it was not originated by the State. It is none the less true, however, that it is due to this previous work of the Swiss pharmacists that the third edition, just published, is official and obligatory for the whole Confederation, except the canton of Glarus, which has profited by the occasion to affirm its retrograde ideas and render itself immortally ridiculous. In 1889, the Federal Council appointed a commission of pharmacists, medical men, veterinarians, and chemists, to elaborate a Swiss official pharmacopœia. This commission ended its labors in April, 1893, and decided to publish the work in the three languages used in Switzerland, instead of in Latin as formerly. There will thus be three separate editions—French, German and Italian. To preserve the same alphabetical order in all three, the Latin denominations of the drugs, etc., have been retained, and these are followed by synonyms in the other languages.

This pharmacopœia bears an international stamp which will contribute strongly, it is to be hoped, toward the realization of the dream of the Pharmaceutical Congress—i.e., the publication of a universal pharmacopœia. Thus from the German Pharmacopœia it borrows the methods of classing and labeling active remedies and poisons, an excellent arrangement which we have strongly appreciated in Alsace, and ought to be general. The ordinary preparations are indicated by black letters on a white ground; more active ones by red letters on a white ground; while poisons are shut up in a cupboard and indicated by white letters on a black ground. The same regulations apply to the cellar and storerooms.

Distilled water alone is recognized. This is also according to the German Pharmacopœia, but here (Alsace) the rule only exists on paper; for, since the enforcement of obligatory assurance against sickness, there is frequently an indisposition to pay for distilled water, and the pump has assumed its former position. The pharmacist often finds himself in a very perplexing situation on this account; for, on the one hand, the Imperial Chancellor's office orders, by its official pharmacopœia, the employment of distilled water alone in all preparations, without exception, and, on the other hand, the local authorities intimate to him the desirability of economizing in the formulæ and using distilled water only where absolutely necessary.

Substances sensitive to light are to be preserved in yellow and black glass receptacles. An excellent innovation, which the German Pharmacopœia had already borrowed from that of the United States, is the specification of the degrees of fineness of the sieves used for powders and substances reduced by cutting. This is one of the most important points in modern pharmacopœias, because it contributes, in great measure, to the uniformity of laboratory preparations. The Swiss Pharmacopœia uses seven distinct sieves, one more than the German, and has accordingly finer powders and coarser species than the latter.

The work resembles the French Codex in its wide choice of formulæ and methods

of manufacture of a certain proportion of chemical products which the German Pharmacopœia is content to fix a standard of purity for. Such conciseness in the latter necessitates the publication of extensive commentaries to compensate for official brevity. A preparation for which a formula might have been included is bismuth salicylate, commercial specimens of which have a very variable composition.

The distilled waters are simple in the case of plants rich in essential oil, and the others are concentrated to one-tenth with the addition of alcohol. There are five altogether, besides cherry-laurel (1 in 1,000) and rose waters. While the German Pharmacopœia recognizes one kind of cinchona only, the Swiss recognizes two—yellow (*Ledgeriana* and *Calisaya*) and red (*Succirubra*); and the French Codex three (gray, yellow, red), from numerous sources, and proving a veritable embarrassment of riches.

Where the Germans have ten plasters, the Swiss have fourteen, and the French twenty-three. A novelty, borrowed from the Americans, distinguishes the Swiss extracts, which are divided into fluid, soft, hard and dry extracts, one part of the last being equivalent to two parts of the drug. In the sixth edition of the U. S. P. these were termed abstracts, but they have been suppressed in the seventh edition. It would be preferable to see but two kinds of extracts, fluid and dry. Pharmaceutical work would thus gain in cleanliness and accuracy.

The latter part of the book contains the following tables: An enumeration of reagents and volumetric solutions; a table of solubilities; lists of active medicaments and poisons; maximum doses; a table indicating the proportion of active ingredients in the pharmaceutical preparations; a table of alcoholic strengths; one giving densities of solutions of ammonia, potash, and soda, as well as nitric, hydrochloric, and sulphuric acids; a comparison of degrees Beaumé with densities; two saturation tables for acids and bases; a reduction of specific weights according to temperatures; and a list of synonyms. There are eighteen tables in all. Finally, the index of contents is in four languages, including Latin.

The Swiss commission has produced a work worthy of modern science and representing an enormous amount of work, greatly augmented by the necessity of publication in three languages. But, by reason of this, the pharmacopœia will be consulted more than any other in the countries bordering on Switzerland, and thus probably hasten the amalgamation of the principal active preparations in the various European pharmacopœias. It is satisfactory to be able fully to congratulate the Swiss Pharmacopœia Commission, and particularly its president, Professor Schaer, director of the Pharmaceutical Institute at Strassburg.

## Tincture of Iodine.\*

BY C. F. HENRY.

Tincture of iodine has long been a subject of controversy, and after fifty years it cannot be said we have a satisfactory preparation, though various and varied have been its formulæ.

The Edinburgh Pharmacopœia tincture, which is still in considerable demand, had a strength of 1 in 16, and was made with alcohol alone, by the aid of heat. The London Pharmacopœia preparation, termed tinct. jodini co., contained iodine

1 in 40, and potassium iodide 1 in 20. The 1864 pharmacopœia ordered 1 in 40 of iodine, with 1 in 80 of potassium iodide, and this was retained in the 1867 edition. In 1870 Mr. Martindale (*Pharm. Journ.*) [2], vol. xi., p. 601 pointed out that this proportion of potassium iodide was insufficient to render the tincture miscible with water, and in the 1885 edition the proportion was increased to 1 in 40, making the quantity of potassium iodide equal to the quantity of iodine.

A comparison with foreign pharmacopœias gives approximately the following results: French Codex, 1 in 15; German and Russian, 1 in 18; United States, 1 in 14; Austrian, 1 in 17; Dutch, 1 in 16. These are all made without potassium iodide, and are all very much stronger than the British preparation, which is 1 in 40. It is the weakness of the British tincture that has been most criticised, and it has several times been emphatically condemned.

Against the plea that the present tincture is too weak it may be urged that it is intended for internal use, and that the liniment is meant to supply the need for an external application. Against this plea I would urge, first, that the tincture is frequently prescribed for external use, and fails in its purpose. Secondly, that the tincture of the Edinburgh Pharmacopœia is regularly prescribed by many on account of its suitability, and the existing pharmacopœia should contain a preparation which would obviate recourse to an obsolete pharmacopœia. Thirdly, that the frequency with which the liniment is diluted when prescribed shows that it is too strong in most cases. Fourthly, because there should be no difficulty in having a preparation suitable for both internal and external use, which should take the place of the present tincture and liniment. To suggest a formula for such a tincture is the object of this note. The author detailed a series of experiments which pointed to the conclusion that the following formula most suitably met all requirements:

## Take of

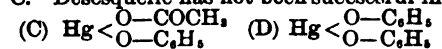
Iodine.....	1½ ounces
Iodide of Potassium.....	1½ ounces
Distilled water.....	½ fl. ounce
Glycerin.....	½ fl. ounce
Alcohol, sufficient to make.....	20 fl. ounces

Add the iodine and iodide of potassium to the water, allow to stand till dissolved, then add the glycerin and sufficient alcohol to make twenty fluid ounces. Such a tincture (1 in 16) would be suitable for both internal and external use, and is, like the present tincture, miscible with water in all proportions. The dose would be 2 to 8 minims, and 24 minims to the fluid ounce would make a vapor iodi corresponding to the present official vapor iodi.

**Mercurial Phenol**—Desesque states that, on adding mercuric chloride solution to an alkaline solution of phenol in molecular proportions, a substance is obtained having the composition represented by A. By using a large excess of alkaline phenol



solution the product has the composition represented by B, and on treating this with glacial acetic acid it is converted into C. Desesque has not been successful in



obtaining a phenolate having the composition represented by the formula D.

\*From the *Journ. der Pharm. von Elsass-Lotharingen*, through *Pharm. Journ.*

\*Read at a meeting of the Edinburgh Chemists' Assistants' Association.

### The Fungus Kingdom.

PHYCOMYCETES; ASCOMYCETES; BASIOMYCETES; HYMENOMYCETES.

The increased attention given to the study of fungi especially from a biological point of view is one of the features of a scientific education in the present day. One of the difficulties which the novice encounters is the cumbersome terminology with which the science of botany in general and mycology in particular is overloaded. While anatomical facts and physiological phenomena must necessarily have distinctive names, it is most desirable that these should not be unnecessarily multiplied. It is a great mistake to imagine that because a man has learned the meaning of some few dozen technical terms he has therefore become a botanist. Science is apt to be hindered rather than helped by a too prolific nomenclature. One of the most important groups of fungi is the phycmycetes, or molds. They are characterized by their minute size, and to the ordinary observers are apparently unimportant. They are, however, an exceedingly interesting family in many ways. Molds multiply themselves in many ways, and afford some of the best marked instances of sexual reproduction. Molds are both saprophytic and parasitic. Among the latter the salmon disease and the potato disease are only too well known. Horticulturists are familiar with another pest—"the damping off of seedlings;" while the young medical man who has to cure a case of ringworm in a fortnight, in order that the "child may go back to school," will have his work cut out. All these conditions owe their existence to molds. Among the ascomycetes some botanists place the so-called sprouting or yeast fungi (saccharomycetes), one member of which, *Oidium albicans*, is well known to us. The parasitic ascomycetes include the fungi which cause the peach blister—"bladder" or "pocket plums"—the vine and the hop mildew, the larch disease, the canker of apple trees, and the caterpillar sphæria. To the same group belongs the fungus which furnishes us with ergot. The interesting family of lichens in which the parasite and its host are mutually beneficial to one another was also described. The basidiomycetes, like the other groups, contain both saprophytic and parasitic species. Among the last named the Uredinæ and their associates, the Ustilaginæ, stand prominent in causing the rust and mildew in wheat, as well as smut and bunt, diseases of economic importance, and not mere scientific curiosities. The large family known as the hymenomycetes, the mushroom, is the best known and certainly the most highly appreciated member in this country (England), but which also contains such harmful species as the dry rot fungus and various tree-destroying parasites. The myxomycetes presents so many analogies to the animal kingdom that some botanists have gone so far as to rechristen them the mycetozoa.—*British Medical Journal*.

### The Origin of Lemon Kali.

Toward the end of 1891 you asked me what was the force of the word *kali* as used in the name "Lemon and Kali," and you did me the honor of quoting my reply in a paper read before the Virginia Pharmaceutical Association in 1892, as shown at page 86 of the Appendix of the resulting "Proceedings." I showed that the carbonate of sodium of the preparation was really the ancient and original *kali*

(ashes) of seashore sods and that this littoral sod-ash or carbonate of sodium, as we now term it, was called *kali* long before the metallic element of the inland "potash" was discovered and long before the name *kalium* was given to that element; hence that makers of "lemon and kali" are at all events not wrong in using the word *kali* for what contains no kalium; hence, anyhow, that there was the "force" of the word *kali* as so used.

The London *Chemist and Druggist* of May 20, 1893, has noticed your paper and reproduced my letter to you. The account caught the eye of my friend and colleague and pharmaceutical historian, Joseph Ince who at once sent to me some information on the subject, which I am sure you will be glad to possess, because it not only settles a question which I could not answer, namely, *why* the word *kali* was introduced into the modern name "Lemon Kali," but *by whom* it was so introduced.

It appears, according to Mr. Ince's father, that one Charles Gomond Cooke of the celebrated English firm of Godfrey & Cooke not only was a sufficiently clever pharmacist to invent this effervescent saline on which you and I have corresponded, but being an astute man of business, and not wishing all the world to know at once how the article was made, was clever enough to invent its name; as well as, I may add, to devise for it special bottles, soon afterward and ever since used throughout English pharmacy under the name of "Salines." Thus for years did he hold a trade monopoly, by disguising a carbonate of sodium under its ancient name of "Kali," enhancing the mystery by the words "lemon and." Cunning compounder and far-seeing godfather, he deserves his reward. He has long rested beneath the sod himself, though his invention has continued to make some stir in the pharmaceutical world as a grateful effervescent saline.—Letter of Prof. John Attfield, London, to Dr. C. B. Fleet, secretary of the Virginia Pharmaceutical Association, Lynchburg, printed in the Proceedings of the Association for 1893.

### Assay of Manganese Oxides.

Last winter Mr. D. B. Dott showed how oxygen could be made without heat by allowing hydrogen peroxide solution to react with black oxide of manganese. A similar reaction is utilized by Mr. Adolphe Carnot (*Comptes Rendus*, cxvi, 1295) for assaying manganese oxides, but as the quantity of oxygen liberated from hydrogen peroxide is indefinite an acid is added whereby the quantity becomes definite—viz., double the available oxygen in manganese peroxide above  $MnO$ . M. Carnot's process is to fix on a suitable stand a 150 Cc. flask, having a caoutchouc stopper with two perforations. Through one of these passes a straight tapped funnel tube or phial with a glass stopper, the point of which must descend to the bottom of the flask. The other aperture has a dry delivery-tube bent four times, ending in a graduated gas-jar, filled with water and arranged on the trough. We introduce into the flask 1 gramme of the manganese oxide reduced to a fine powder, then about 30 Cc. of water and 20 Cc. of nitric acid, which decomposes any carbonates present in the sample. We allow the carbonic acid to escape entirely; then insert the stopper, leaving the stopper open. We can then observe that not only the graduated jar, but also the delivery-tube, is filled with water up to the point where it emerges from the water trough. Close

the stopper, pour into the funnel 20 Cc. of 10 vol. hydrogen peroxide, allowing it to flow gently into the flask, taking care to close the stopper as soon as the last traces of peroxide had passed. The action takes place at once without heat, and the escape of oxygen, which is at first very rapid, is completed in a few minutes if care is taken to shake the flask from time to time. Nothing then remains but to measure the volume of oxygen liberated and from it calculate the oxygen value of the manganese oxides used. For absolute accuracy the following is the formula for calculation, taking  $V_t$  as the gaseous volume, measured at the temperature  $t$  and the atmospheric pressure  $H$ . The gas being saturated with moisture, the tension  $h$  is allowed according to the temperature. As the weight of 1 liter of dry oxygen at  $0^\circ$  and at 760 mm. is 1.4298 gramme, then we calculate in grammes the weight  $p$  of available oxygen in 1 kilo. of ore by means of the formula:

$$p = \frac{1}{2} V_t \times 1.4298 \times \frac{H - h}{760} \times \frac{1}{1 \times 0.00367t}$$

### Oil of Lavender.

Ed. Hirschsohn is contributing to the *Pharmaceutische Zeitschrift für Russland* a useful series of papers on essential oils. In the course of which he gives particulars of samples of lavender oil which have been obtained from authentic commercial sources. It will be seen from the following table that the fractionation of the oils resulted in some valuable figures:

	Brand used	1st Distillate.	2d Distillate.	3d, etc., Unillate.	Total.	Solubility in parts of 70 and 80 per cent. alcohol.			
						1st Distillate.	2d Distillate.	3d Distillate.	4th Distillate.
1	Mitch.	26	20	47	93	2.4	70	2	70
2	"	32	20	34	86	8	70	1.8	70
3	Extra.	30	16	33	79	8	70	1.6	70
4	Superfine	30	24	43	97	3.4	80	2.4	70
5	"	30	2	45	77	2.2	70	2	70
6	I.	26	20	39	85	5	80	2	70
7	Drome.	26	20	39	85	5	80	2	70
8	Gallic.	30	18	35	83	6	80	2	70
9	Blanc	24	22	43	89	5	70	1.8	70
10	Alpes.	18	16	53	87	1.4	80	1	80
11	"	14	14	49	77	1	80	1	80
12	Ordinary	28	20	51	99	14	80	1	80
13	Gallic.	27	26	39	92	3.6	80	2.8	70
14	"	18	18	59	95	1.4	80	3	70

The important point to notice is the ready solubility of the first distillate in 70 per cent. spirit—viz., one part of the oil in 2 to 3 parts of the spirit. The solubility decreases very markedly on the addition of turpentine. Thus 20 per cent. of turpentine added to a pure oil gave a first distillate which was soluble to the extent of 1 in 12 of 70 per cent. alcohol, and 50 per cent. of turpentine reduced the solubility to 1 in 25 of 80 per cent. alcohol. It is also noticeable that most of the turpentine distills in the first fraction.—*Chem. and Drug.*

Since the metric system has been promulgated as official in the United States Pharmacopœia it may be useful to our readers to recall the fact that the United States fractional silver currency bears a simple relation to its various units, a relation that has been made designedly and by law. The half dollar equals 12½ grams, the quarter dollar 6¼ grams and the dime 2½ grams. Eighty half dollars are equal to 1 kilogram.

## New Apparatus, Novelties, Etc.

### A New Sublimation Apparatus.

G. Oddo has published in the *Gazetta Chimica Italiana* the description of a new apparatus substantially as follows:

A stand (Fig. 1) supports on its two rings two asbestos sheets *a* and *b*. The sheet *a* has an opening in which is placed a thin beaker which is not very deep and in this is placed the substance to be decomposed.

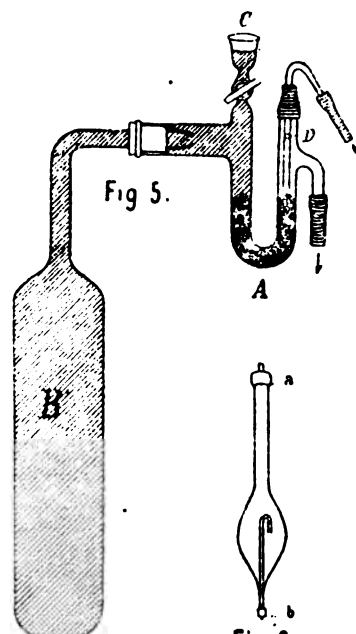
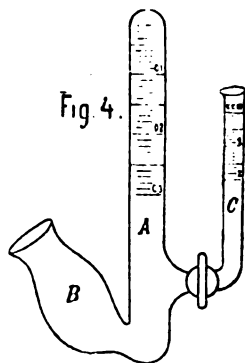
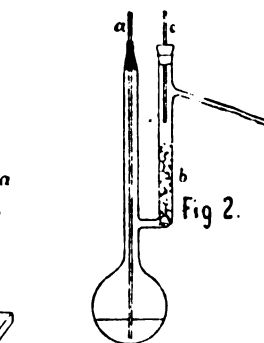
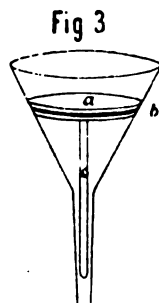
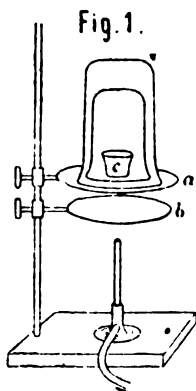
Two other larger beakers are invented over this, the inner one serving to arrest the sublimed substance, the outer one retaining all vapors which escape from the inner beaker.

The sheet *b* serves to distribute the heat and should be placed nearer to or farther from the beaker according as the substance to be sublimed is more or less volatile. It is advisable to lay two sheets of paper over the upper sheet of asbestos, having holes in them to correspond with that in the asbestos.—

*Pharm. Centralhalle.*

### For Fractional Distillation.

L. Claisen describes an apparatus for fractional distillation as follows: (*Liebig's Annalen*, 277, 177-178; *Pharm. Centralh.*, 1894, p. 124): A dual distillation apparatus (Fig. 2) is provided on one side with a capillary tube *a* which reaches to the bottom and on the other with a thermometer *c*. It is advantageous to put some pieces of glass in the neck on the side *b*, to prevent the sloping over of the liquid. In using the apparatus with liquids whose boiling points are not too high, the space above the pieces of glass may be wholly or partially filled with glass thus combining the advantages of the Hempel column with those of the vacuum apparatus. These flasks are made by C. Heintz & Co. of Aachen, Germany.



### Improved Porcelain Filter Plate.

Max Kähler has received an improved porcelain filter plate which is shown in Fig. 3 (*Zeit. f. anal. Chem.*, 1894, 64; *Pharm. Centralh.*, 1894, 124). This plate lessens the probability of breaking the funnel and it is always in the correct position. The edge of the plate is fitted with a rubber ring, while through its center a glass tube passes down into the neck of the funnel.

### Hinds' Ureometer.

Fig. 4 shows a variation in the shape of the ureometer proposed by Hinds (*Chemist and Druggist*). The tube *A* and the vessel *B* are filled with bromide solution (40 Gm. of caustic soda, 100 Gm. of water and about 2 Cc. or 4 Gm. of bromine).

The urine is placed in the open tube *C*. By opening the stopcock in this tube one Cc. of urine is allowed to flow into the bromine solution in which the free nitrogen is afterward estimated.

### Traube's Thermostat.

In his work entitled "Physikalisch-chemische Methoden" J. Traube illustrates a valuable form of a thermostat shown in Fig. 5. It consists of a U-shaped tube *A* to which is attached by means of a rubber stopper a medium small cylindrical tube *B*, which is filled either with an oil or with a concentrated solution of calcium chloride. A sufficient quantity of mercury is then poured in through the funnel. The air in the space between the mercury, cylinder *B*, and the funnel *C*, is then entirely replaced either by oil or by calcium chloride solution. The influx and egress of the gas to the burner is shown by the arrows. The cylinder *B* should be thrust into the water bath or drying

closet, which is to be maintained at a uniform temperature.—*Pharm. Centralhalle.*

### Landott's Pipette.

According to J. Traube ("Physikalisch-chemische Methoden") the proper way to determine solubility is to mix the solvent with an excess of the powdered substance and allow to stand, with frequent agitation, at a uniform temperature for from 2 to 3 hours. After allowing the solution to settle Landott's pipette, see Fig. 6, is suitable for drawing off a definite quantity of the solution. This should have the same temperature as the solution. The pipette may be closed by *a* and *b*. The quantity of the solution is determined by weighing and the pipette afterward rinsed out.

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### Modern Botany.

Prof. J. Reynolds Green, professor of botany to the Pharmaceutical Society of Great Britain gave a lecture on "Recent Work on the Physiology of the Pollen Tube" to the Liverpool Biological Society, on March 9. The lecturer described minutely the process of germination of the pollen grain, which he said is easily observed under the microscope. If the grain be treated with a solution of chloral hydrate containing iodine the grain is rendered transparent, and granules of starch contained therein are stained violet. There are a large number of starch granules present, except in young grains, when there are few if any. These starch grains are seen to travel gradually down the pollen tube, and slowly separate from each other; then, passing to the point of activity (the apex of the tube), their character becomes changed, first into dextrine, and next into sugar. This is beautifully seen in the pollen tube of the lily; as the granules

approach the apex their color (violet) changes into red, indicating dextrine. Thus the pollen grain ministers to the nutrition of its own tube. There are in the tubes granules which are not starch, and they are extruded from a very minute orifice at its apex. It is not an unreasonable hypothesis that these granules are enzymes, which play an important part in the nutrition of the tube. If the style of the lily be examined at the right age it will be found that starch is being carried to it by the fibro-vascular bundles and then formed into small granules, providing in this way more nourishment for the pollen tubes. This is observable in both longitudinal and transverse sections. Further provision for the nourishment of the tube is made in the form of malt sugar—probably the result

of the action of the enzymes on the starch granules. At a certain age the enzymes are found to increase; also the starch exceeds what is found in the tube originally, and it is supposed that the tube stores away at first more nutritive matter than it requires, in order to provide for contingencies. In the pollen of the *Zamia* there is no starch, but if the tube be placed in a solution containing sugar—say the pulp of the apple or pear—starch at once begins to form. Sugars (malt, grape and cane), frequently found in the tube instead of starch.

### SPRAY IN SIMPLE CHRONIC RHINITIS.

[Medical Press and Circular.]

Sodii boratis.....	gr. xv
Sodii bicarbonatis.....	gr. xv
Ol. eucalypti.....	℥ ij
Thymolis.....	gr. j
Mentholi.....	gr. ss
Glycerini.....	℥ ss
Aq., ad.....	℥ j

Add two teaspoonfuls to one ounce of warm water and use as a spray.

## Medical Notes.

### Treatment of Acne.—

Ichthyolia.....	3 iss
Ether sulph.....	3 iss
Alcohol.....	3 ss

To be used externally. The application should be dabbed over the acne spots several times daily.—*Med. Press and Circular*.

When there is much pustulation (*acne varioliforme*) the following ointment may be used:

Bismuthi subnitratæ {	
Hydrarg. ammoniati {	aa gr. xxx
Ichthyolia..... {	
Vasellini, ad.....	3 j

For external use. Every evening at bedtime, the acne pustules must be smeared with this ointment.

### Sedative Plaster.—

Lead plaster.....	10 parts
Extract belladonna.....	{ of each 1 part
Resin picis sylvestris.....	

Spread on linen in the manner of an adhesive plaster, and apply over the painful sites in rheumatism, pleurodynia, etc.

Goldbeater's Skin is said to be good for cracked nipples. M. J. Blechmann (*Paris Medical*) advises the treatment of cracked or fissured nipples by means of gold beater's skin. Over the nipple affected, after wetting with water, a piece of skin is applied, first being pierced with a number of holes by a needle. The skin takes the form of the nipple, and adheres like a second epidermis. After each nursing a new piece is applied.

Treatment of Psoriasis.—The following local treatment is found to be very serviceable by Dr. Eddowes (London). The various patches are painted, after removal of the scales with soap and hot water, with a saturated solution of tincture of iodine, about once a week, and an ointment consisting of equal parts of the ung. sulphuris, and the ung. picis liquidum applied daily. Another useful application is the following:

Ung. picis liq.....	3 iss
Acid salicylatæ.....	gr. xxv
Ung. lanolini, ad.....	3 j

The Therapeutic Use of Salophen.—According to Siebel, Guttman, Koch, and others salophen possesses all the advantages, without the disadvantages, of salicylate of soda, and it is also superior to salol. It is prepared in the form of a white flocculent powder, has neither smell nor taste and is of neutral reaction. In cold water it is insoluble, but is freely soluble in hot water, alcohol and ether. Its greatest advantage, however, appears to be that of relieving pain, as for example in cases of acute rheumatism. Also in neuralgia such as intercostal, dental, and other forms it acts as a powerful analgesic. In a case of tabs with much cephalalgia it acted like a charm in the relief of the latter symptom. The dose is from seven grains to half a drachm a day taken either in the form of powders, pills, or in cachets.

Rubidium Iodide.—Dr. S. Leistikow (*Monat. f. Prakt. Derm.*) reports the results of his therapeutic experiments with rubidium iodide. The author employed a 5 per cent. aqueous solution in eight cases, seven of which were definitely cured, on the average, in 14 days. One of these patients suffered from two ulcers specific of the hard palate. After local cauterization for 8 days, with 10 per cent. chromic acid, by which the ulcer bottom was cleansed, rubidium iodide was administered internally. Complete cure after 14 days, without any influence on the cardiac condition.

The rubidium salts are not cardiac poisons, like those of potassium, for which reason they are to be recommended as succedanea. No gastric disturbances are reported. The taste of rubidium iodide is not as disagreeably salty as that of potassium iodide.

Salophen.—Köster (*Therap. Monatsh.*, January, 1894) has used salophen in 80 cases of acute rheumatism, a few 15-grain powders often sufficing to remove all pain; exudation into the joints also disappeared as a rule. The administration was usually continued during four days, 4 to 6 doses per diem being given. The only unpleasant symptoms noticed were vertigo on three occasions, and drowsiness and excessive perspiration four times. No gastric disturbances were observed. Extension of the disease took place twice and relapses also occurred twice; these, however, were at once relieved by a repetition of the treatment. Salophen is not a powerful antipyretic, but is more effectual in neuralgic and similar affections. One case of severe brachial neuralgia is quoted which had resisted all other known anti-neuralgic remedies, and which was cured by 1 drachm of salophen given on four successive days.

Hemorrhoids—Engle has employed with good results suppositories of aristol prepared as follows:

Aristol.....	4.0
Ext. opil.....	0.15
Ext. belladon.....	0.05
Quinin. hydrochlor.....	1.5
White wax, enough to form six suppositories.	

Sig.: Use twice daily, morning and evening, after previous irrigation with cold water.

The author also advises after each defecation the application to the lower part of the rectum of the following ointment:

Aristol.....	2.0
Balsam Peru.....	4.0
Ung. simpl.....	30.0

As a purge he administers:

Potass. bitartrat.	
Flor. sulphur, aa 25.0	

Sig.: One to two teaspoonfuls two or three times daily.—*Sem. Med.*

Treatment of Alopecia Areata.—Leistikow (*Monatsh. f. prakt. Derm.*, January, 1894) for the last four years has used chrysarobin almost exclusively in alopecia areata. The results in total alopecia were satisfactory, though not reliable; in the partial affection the cures were 58 per cent., but among these relapses occurred in 30 per cent.; of these patients two-thirds were lost sight of, but the remainder were again cured and remained free. Formerly he only used the chrysarobin as a 5 to 10 per cent. ointment applied once or twice daily, but now he prepares a stick composed of chrysarobin 30, colophonium 5, cera flava 35, olive oil 30 parts, the application thus being more simple. Every evening the stick is rubbed over the affected part, which is washed clean with olive oil in the morning. In some days the skin often becomes irritable and red, when zinc ointment is substituted for a time. The author considers chrysarobin the best remedy in this affection.

"Antidiphtherine."—V. G. Grigorieff (*Vratch.*, No. 2, 1894, p. 567), of Professor N. T. Filatoff's clinic in Moscow, used Klebs's specific in four cases of diphtheria in children, and came to the conclusion that the remedy is worthless. In spite of the paintings, repeated twice daily, false membranes continued to spread steadily, fever remained high or even increased, etc. Two children—one of whom aged 8, had been admitted on the third day of the disease, and the other, aged 15

months, on the second—died in forty-eight and twenty-four hours respectively. In a third patient, aged 4 years and 3 months, admitted on the fourth day of illness, who had been getting worse during a four days' treatment by "antidiphtherine," local applications of a 1 per mille solution of corrosive sublimate were substituted, with the result that the faucial deposits began to disappear, and the child ultimately made good recovery. Exactly the same course of events was observed in a boy aged 4 years and 7 months, in whom the "antidiphtherine" treatment was commenced on the second day of symptoms, but given up in about twenty-four hours, on account of a considerable aggravation of fever and local condition. The bichloride paintings cleared the child's throat in about four days. A set of elaborate experiments, undertaken by the author in order to test the bactericidal effects of Klebs's preparation, proved that (1) the latter does not in the least inhibit the development of diphtheria bacilli even after twenty-four hours' continuous contact; (2) a 1 per mille solution of Hg Cl, destroys the microbes even after a two minutes' contact; and (3) Hg Cl, has an additional advantage over "antidiphtherine," inasmuch as it kills any species of bacteria which happen to be present in a diphtheria patient's throat.

Generation of Gas in the Bowel for Intussusception.—Dr. J. T. C. Williams gives (*the Lancet*) a case of intussusception in an infant where an operation was not permitted and in which, after failure of all the ordinary methods, relief was secured by injecting, first a solution of 90 grains of citric acid, and second, slowly, a solution of 120 grains of sodium bicarbonate and then holding the nates firmly together. The injection was made by a catheter passed up 9 inches. Where a case is of long standing and gangrene has set in there is danger of rupture.

### Artificial Immunity against Cholera.

Dr. Issaff of the Berlin Institute für Infektionskrankheiten has come to the following conclusions from the result of a series of unusually comprehensive experiments:

1. The intraperitoneal or subcutaneous injection of the blood serum of normal men, and also of acid, alkaline or neutral liquids (urine, bouillon, distilled water, physiological salt solution, etc.) gives guinea pigs a certain resistance against intraperitoneal cholera infection. This resistance is weak and transient and is not identical with the true immunity produced by inoculating the animals with the bacterial products of cholera.

2. Inoculated animals, notwithstanding their high degree of immunity against the living vibrio, are not immune to the toxins of the same vibrio. The blood of the inoculated guinea pig has no antitoxic properties.

3. The blood of the carefully inoculated animals possesses in a high degree the property of conferring immunity, and, in a certain sense, therapeutic qualities.

4. The blood of convalescents from cholera has the same specific and curative properties as does that of inoculated guinea pigs. These properties first appear at the end of three weeks after patient is taken sick and entirely disappear three or four days later.

5. The cell reactions which find expression in phagocytosis play the most important role in the protection given by injections of bouillon, salt solution, etc.—*Zeit für Hygiene, etc.*, xvi., 2, 1894.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our readers to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the quality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Elixir of Gentian and Iron.**—P. T. writes: "I have trouble in preparing a stable elixir of gentian and iron with the published formulas. Will you kindly print a formula that can be depended upon to produce a satisfactory article?"

We give below a formula which is used with very satisfactory results by a subscriber:

I.  
Tincture iron citro-chloride ..... 1,040 minims  
Simple elixir enough to make ..... 8 fl. ounces  
**Mix.**

II.  
Fluid extract gentian ..... 4 drachms  
Simple elixir, enough to make ..... 8 fl. ounces  
**Mix.**

The above solutions are mixed in equal proportions to produce a finished elixir of gentian and iron.

**Patent Bottle Filler.**—C. M. W. says that the patent bottle filler asked for by C. H. M. in the March 22 issue can be procured from the makers, Chas. E. Hires & Co., Philadelphia, or through any jobber.

**Sarsaparilla Syrup.** C. M. W.—This is best made as follows: First prepare a "Sarsaparilla Essence" composed of:

Oil of wintergreen ..... 2 fluid drachms  
Oil of sassafras ..... 2 fluid drachms  
Alcohol ..... 8 fluid ounces  
Then prepare a syrup containing  
Sarsaparilla essence ..... 2 fluid drachms  
Comp. fluid extract sarsaparilla ..... 2 fluid drachms  
Solution caramel ..... 3 fluid drachms  
Simple syrup ..... 2 pints  
Tincture quillaja ..... 2 fluid drachms  
**Mix.**

**Oil of Muguet.**—I. W., Jr., writes: "Will you kindly tell me what oil of muguet is?"

Warrick Frères of this city say that oil of muguet is a definite chemical compound used by perfumers for blending purposes. According to others it is a mixture of oil of linaloe and terpineol.

**Oil of Linaloe.** J. W., Jr.—This is the odorous principle of the Mexican Linaloe, *Bussara Delpechiana*, though the New Mexican Pharmacopoeia also gives *Amyris Linaloe* as the source of the oil. The oil is described as an oxygenated body having the formula  $2(C_{11}H_{18}) 5H_2O$ , this formula answering to that of a hydrate of terebenthene or of an isomer. The odor of the oil is likened by Poisson ("Odorographia," page 290) to a mixture of lemon and jasmine, and by others it is thought to resemble bergamot. The odoriferous constituent of oil of Mexican Linaloe was discovered by Semmler (*Ber. d. D. Chem. Ges.*, 1891, xxiv, p. 207—"Odorographia," p. 290) and termed *Linalool*. This has recently been isolated by Schimmel & Co. who find that it is the principal constituent of the oil, and is the sole bearer of the latter which is so valued in perfumery. It is described as an almost colorless liquid, very soluble in alcohol of sp. gr. 0.878 at 15° C.

Sawyer says the acetic ester of linalool

constitutes about 40 per cent. of oil of bergamot, so it is not surprising that the odor of linaloe has been thought to resemble that of bergamot.

**Sachet Powders.** I. W., Jr.—We can only give you a short selection from the large number of varying formulas scattered through different works:

### HELIOTROPE SACHET.

Powdered orris ..... 2,000 parts  
Powdered rosa centifolia ..... 1,000 parts  
Powdered tonka bean ..... 500 parts  
Cut vanilla bean ..... 250 parts  
Powdered musk ..... 10 parts  
Essential oil of almonds ..... 1 part

Pound the musk and vanilla bean together and add the rest. Pass through a sieve of fairly wide mesh and bottle. This affords an excellent imitation of heliotrope.

### LAVENDER SACHET.

[PISSE.]

Powdered lavender ..... 75 parts  
Powdered benzoin ..... 50 parts  
Oil of lavender, Mitcham ..... 1 part  
**Mix.**

### PATCHOULY.

Patchouly herb, ground ..... 8 ounces  
Lavender flowers, English ..... 3 ounces  
Powdered orris ..... 2 ounces  
Powdered cloves ..... 1 ounce  
Oil of bergamot ..... 1 drachm  
Essence ambergris ..... 1/2 drachm  
Essence musk ..... 1/2 drachm  
Otto of patchouly ..... 2 drops

### NEW MOWN HAY.

Orris, in coarse powder ..... 1 1/2 pounds  
Rosa centifolia, ground ..... 1 1/2 pounds  
Orange flowers, ground ..... 1 pound  
Benzoin, in coarse powder ..... 1/2 pound  
Tonka beans, ground ..... 1/2 pound  
Ambrette, ground ..... 1/2 pound  
Oil of verbena ..... 1/2 drachm  
Essential oil of almonds ..... 1/2 drachm

### MUSK.

Otto of rose ..... 1 drop  
Ammonium carbonate ..... 3 grains  
Musk ..... 9 grains  
Powdered orris ..... 8 ounces  
**Mix.**

**St. John Long's Liniment.** D. G. S.—This is composed of

Yolk of egg ..... One  
Essence of lemonw ..... 30 minims  
Acetic acid ..... 1 fl. ounce  
Oil of turpentine ..... 1 1/2 fl. ounces  
Rose water ..... 1 fl. ounce

The yolk of egg is first rubbed down with the water and acetic acid, then placed in a bottle with the turpentine and shaken together until emulsified; lastly, the lemon is added.

**Tincture of Alkanet.** D. G. S.—This tincture is made by macerating 20 parts of alkanet in sufficient alcohol to make 100 parts for seven days and filtering. It is used as a coloring agent.

**Bismuth Hair Dye.** R. McR.—A modification of the formula referred to is found to give better results. We give the modified formula below:

Tartaric acid ..... Parts.  
Bismuth nitrate ..... 10  
Ammonia water 0.88 sp. gr. ..... 60  
Glycerin ..... 30  
Sodium hyposulphite ..... 100  
Water sufficient to make ..... 500

Dissolve the acid in 26 parts of water and dissolve the bismuth in this solution; add an excess of water to precipitate the bismuth, collect the precipitate and dissolve in the ammonia water, and then add the glycerin, the sodium hyposulphite and enough water to make 500 parts.

**Carmine Red Coloring.**—A. C. W. asks: "What can I use to color dilute alcohol preparations a carmine red that will not be affected by acids, alkalis or chlorine gas."

A few drops of liquid cochineal will usually be found to answer, though few of

the vegetable colors will stand prolonged treatment with chlorine without fading.

Liquid cochineal is prepared as follows:

Cochineal in fine silver grains ..... 1 ounce.  
Potassium carbonate ..... 1 ounce.  
Aluminum and potassium sulphate ..... 1 ounce.  
Citric acid ..... 1/2 ounce.  
Water, a sufficient quantity.

Boil the cochineal (bruised) in a glass or copper vessel of suitable capacity in 8 fluid ounces of water, to which the potassium carbonate has been added. Mix loosely the alum and citric acid in powder and add gradually to the boiling liquid, and continue to boil until effervescence has entirely ceased. While still hot filter and wash the filter with hot water to make the whole measure 12 fluid ounces.

The aniline dyes will be found useful, many of the more recently introduced reds and shades of that color being well adapted for the purpose indicated; tincture of cudbear may also be mentioned.

**Liquid Bluing.** C. T. D.—The best liquid washing blue is made by dissolving indigo carmine in water containing a trace of gum arabic. The proportions of each are as follows:

Gum arabic ..... 6 drams  
Indigo carmine ..... 1/4 ounces  
Water, enough to make 16 fluid ounces.

A cheaper article may be made by dissolving one ounce of a mixture composed of equal parts of Prussian blue and oxalic acid in one pint of water.

**Red and Black Inks.** W. J. B.—See DRUGGIST AND RECORD, March 22, 1894, page 146. The formulas there given are excellent.

**Lydia Pinkham's Compound.**—W. J. B. writes: "In answer to J. R. W. (DRUGGIST AND RECORD, March 8) I would say that Lydia Pinkham's compound is understood to be an infusion or decoction of *Gnaphalium polycephalum* a plant known in common with several others as Life Everlasting."

**Soluble Extract of Ginger.** A. N.—The following formula will be found excellent for the purpose:

Jamaica ginger (ground) ..... 2 pounds  
Pumice stone (powdered) ..... 2 ounces  
Lime (slaked) ..... 2 ounces  
Dilute alcohol, sufficient to make ..... 4 pints

Rub the ginger with the pumice stone and lime, thoroughly mixed; then moisten with dilute alcohol until perfectly saturated; place the mixture in a narrow percolator, being careful not to use any force in packing, simply so that the menstruum will go through uniformly; lastly, add dilute alcohol and proceed until 4 pints of the percolate are obtained; allow the liquid to stand 24 hours and filter if necessary.

**Essence of Sarsaparilla.** A. N.—An extract or essence of sarsaparilla suitable for preparing syrup of sarsaparilla for the soda fountain can be made as follows:

Compound fld. extract sarsaparilla ..... 2 drachms  
Caramel solution ..... 3 drachms  
Oil of wintergreen ..... 2 drachms  
Oil of sassafras ..... 2 drachms  
Alcohol ..... 8 fl. ounces

Dissolve the oils in the alcohol and add the extract of sarsaparilla and solution of burnt sugar. One ounce of an extract prepared as above will be found sufficient for two pints of syrup.

**Glycerin Cosmetic Jelly.** T. B. An excellent emollient, for use against chapped hands and face, is said to be preparable as follows: Two drams of gelatin are soaked in 6 fluid ounces of rose water, dissolved in the water-bath, and admixed, after cooling and while the mass is still liquid, with 5 drams of albumen. On heating the mixture again, it becomes perfectly clear—from the precipitation of



the albumen. It is then admixed with a solution of 12 grains of salicylic acid in 5 fluid ounces of glycerin. The liquid, well mixed and filtered through a hot-water funnel, is finally poured into wide-mouthed bottles, where it solidifies.

## Correspondence.

### Legislation in New York.

Editor AMERICAN DRUGGIST:

You are doing good work in keeping us posted and in fighting obnoxious legislation. Every department of trade is annoyed by useless and obnoxious legislation, and pharmacists should work together to defeat all such legislation. There are too many smart Alecks in the legislature.

OLD PHARMACIST.

BUFFALO.

### Piperazine Prices.

Editor AMERICAN DRUGGIST:

Some misunderstanding has arisen among our customers and the drug trade through an oversight on your part in inserting in your issue of March 22 an advertisement of ours which should have been replaced by new matter. May we ask you to be good enough to advise your readers of the change in the price of Piperazine-Bayer which took place on February 24? Piperazine-Bayer is now sold at the uniform price of \$1.50 for tubes containing ten tablets and of \$4.25 for vials holding one ounce. By giving this communication a prominent position in your valued journal you will confer a favor.

W. H. SCHIEFFELIN & Co.

### The Proprietor's Side Of It!

Editor AMERICAN DRUGGIST:

Everyone calling on the drug trade and reading the drug journals is familiar with the cry of the retail druggists against the sins of the proprietor in selling his goods through the drygoods and department stores. This cry is rather that of a spoiled child than that of a shrewd business man.

I have come to this conclusion from my own very considerable experience as a manufacturer of proprietary articles. I have gone to the retail druggist, shown him my preparations, asked him to distribute advertising matter for me, and shown him that I was advertising to the consumer independent of his aid, and that if he would give me his aid to that extent he would be able to build up a lucrative business without any outlay on his part. The advertising which I wanted him to use was neat and attractive and also useful, as I furnished counter pads of wrappers printed in such a manner that he could use them in wrapping goods without any offence to the customers. Almost uniformly the druggist has declined to use this advertising matter, saying that he would not have anything to do with the preparation, however good it might be, until he had calls for it.

On the other hand, having been discouraged by the attitude of the drug trade, I have gone to the drygoods and department stores, have been treated with uniform courtesy and have almost invariably received their co-operation. The drygoods men, being shrewd business people, saw an opportunity here to add to their profits and build up trade without any expense to themselves. In the drug trade I was met with scant courtesy at best, and in some places with positive rudeness, although I thought the proposition I made was as much to their interest as my own.

Now, after the drygoods people and my advertising have built up a large demand for my goods I hear the druggist making a most vigorous protest, saying that my goods should not have been placed through the drygoods people but through the drug trade, that my methods were irregular, etc., etc. Are not the druggists themselves responsible for the course I pursue? I think they are.

PROPRIETOR.

## Bibliography.

THE NATIONAL DISPENSATORY. Containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines, Including Those Recognized in the Pharmacopoeias of the United States, Great Britain and Germany. With Numerous References to the French Codex. By Alfred Stillé, M.D., LL.D., Professor Emeritus of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania; John M. Maisch, Ph.M., Ph.D., late Professor of Materia Medica and Botany in Philadelphia College of Pharmacy, Secretary of the American Pharmaceutical Association; Charles Caspari, Jr., Ph.G., Professor of Pharmacy in the Maryland College of Pharmacy, Baltimore, and Henry C. C. Maisch, Ph.G., Ph.D. New (Fifth) Edition; Thoroughly revised, according to the New United States Pharmacopoeia (Seventh Decennial Revision, 1894). In one Imperial Octavo Volume of 1,000 Pages, with 350 Engravings. Cloth, \$7.85; Leather, \$8. With Ready Reference, Thumb Letter Index, Cloth, \$7.75; Leather, \$8.50.

THE DISPENSARY OF THE UNITED STATES OF AMERICA. By Dr. Geo. B. Wood and Dr. Franklin Baché. Seventh edition. Thoroughly revised and largely rewritten, with illustrations. By H. C. Wood, M.D., LL.D., Professor of Materia Medica and Therapeutics and of Diseases of the Nervous System in the University of Pennsylvania; President of the Convention of 1890 for the Revision of the Pharmacopoeia of the United States; member of the National Academy of Science. Joseph P. Remington, Ph.M., F.C.S., Professor of Theory and Practice of Pharmacy in the Philadelphia College of Pharmacy; first Vice-Chairman of the Committee of Revision and Publication of the Pharmacopoeia of the United States of America; and Samuel P. Sadtler, Ph.D., F.C.S., Professor of Chemistry in the Philadelphia College of Pharmacy. Philadelphia: J. B. Lippincott Company, 1894. Royal 8vo; pp., 1950; Cloth, \$7; Leather, \$8; with Patent Index, 50 cents extra.

In the many critical and laudatory notices of the fifth edition of the National Dispensatory which have appeared in the medical and pharmaceutical prints, following upon its early appearance after the new Pharmacopoeia, one note has been sounded distinct above the rest; and that is one of praise to the publishers for the celerity which they have displayed in revising the work and placing its vast fund of necessary information before the medical and pharmaceutical professions.

Although the work has been brought fully into line with the new Pharmacopoeia, it is not apparent that sufficient effort has been exerted in other directions to bring the book up to our present state of knowledge. Much of the recent work in pharmaceutical research seems to have been overlooked and a hesitancy about giving credit to new workers in the field of practical pharmacy is noticeable.

Being largely used by working pharmacists both at the working bench and the dispensing counter, a work like the National Dispensatory should be practical in its scope, and contain, in addition to its valuable notes on the history and descriptions of drugs and chemicals, a summary of the principles which should guide the dispenser in compounding preparations that are difficult to present in agreeable form—of which elixirs and emulsions of the newer hypnotics and antipyretics may be named as examples.

That something has been sacrificed to haste in compiling the volume is shown in the succeeding paragraphs, which constitute a cursory but fairly comprehensive summary of its more important features.

Beginning with the article on Abrus we find some additions to the constituents. The part on medicinal action and uses is rewritten; but reference to common sophistications and adulterations of the drug are wanting. The numerous products which have been proposed from time to time as substitutes for Acacia are not given and the article on this subject remains as in the previous editions.

The article on Acetanilid is new. Under Acidum Arseniosum are given two new illustrations of improved reduction tubes. In the article on Tannin Prof. H. Trimble's recent work on "The Tannins" has been consulted. Von Schröder's modification of Lowenthal's method of estimation of tannin is given.

The part on the constituents of Aconitum has been in part rewritten. The investigations of Ehrenberg and Purfürst (1892) and those of Dunstan and Harrison (1898) are mentioned. An additional illustration is given of the leaf of aconite. The part on Aconitine contains the most recent work of Dunstan and Carr (1893).

The article on Adonis is new but does not contain a record of the isolation of a crystalline principle by Merck (*Ber.*, 1892).

The articles on materia medica and botany from this point on have apparently not been so thoroughly revised. This is in all probability due to the serious nature of the illness of the late Prof. John M. Maisch, as he had no doubt begun on the complete revision of the work, as its beginning amply testifies.

The article on Aloes remains without apparent alteration. This may likewise be said of the following, to the literature of which additions or corrections have been made during the past few years: Ambergis (Beauregard and Jourdain, 1892); Angelica root (phelandrine in oil of root and seeds by Schimmel & Co., 1891); Angustura (Alkaloids by Beckurts and Nehring, 1891); Areca (alkaloids by Jahns in *Berichte* 1891); Arnica (Borner on the constituents *Apotheker Zeitung*, 1892); Asafetida (Semmler published an exhaustive paper on the oil in *Archiv*, 1891); Atropine nor Belladonna; Benzoin (work of Ludy in *Archiv*); Berberis (researches upon berberine and its derivatives by Prof. Schmidt and others, *Archiv*, 1890); Caf. feine and Theine (labors of Dunstan and Shephard, *Archiv*, 1893); Cannabiss indica (an alkaloid by H. F. Smith, resembling the cannabinine of Siebold and Bradbury, *Am. J. Pharm.*, 1891); Chelidonium, (alkaloids by G. König, *Chem. Centralb.*, 1891); Coca (alkaloids by Liebermann, Hesse and others, *Phar. Record*, vol. xv., No. 8); Conium (a new crystalline base by Merck and further examined by Adam and Ladenburg, *Berichte*, 1891); Fabiana (negative results of the presence of an alkaloid in this plant by Landenbeck, confirming the results of Nivière and Liotard); Frangula (investigations of Thorpe and Miller on frangulin, *Jour. Chem. Soc.*, 1891); Gelsemium (bases by Cushing and gelseminine by Spiegel, 1893); Grindelia robusta (the active principles by Schneegaus); Hyoscyamus (alkaloidal value of annual and biennial herbaceous by A. W. Gerrard, *Ph. J. Tr.*, 1890); Myristica (paper by Warburg on the useful varieties); Opium (no reference is made to the new alkaloid xanthaline discovered by T. and H. Smith & Co.; also tritopine by Kander); Pareria brava (examination by Ringer and Brooke for distinguishing the true from false, *Ph. J. Tr.*, 1892); Rhamnus Purshiana (isolation of the active principle cascarine by Leprince, *Compt. rend.*, 1893); Sabadilla (examination of fat and essential oil of sabadilla seeds by E. Opitz; also two new

alkaloids, sabadine and sabadanine, by Merck, 1891); Sanguinaria (alkaloids of the root by König, *Chem. Centralb.*, 1891); Sarsaparilla (isolation and examination of glucosidal constituents of sarsaparilla by W. v. Schultz, *B. M. J.*, 1892); Strophanthus (examination and means of identification of the Strophanthus seeds of commerce by E. M. Holmes, *Ph. J. Tr.*, 1893); Strychnine (constitution by Tafel, *Annalen*, 1891); Thea (amount of theine in tea by Paul and Cowley, *Ph. J. Tr.*, 1890); Urtica (crystalline alkaloid obtained by Oddi and Lomonaco, *B. M. J.*, 1892); Valerian (isolation of two principles from Valerian as recorded by Waliszewski, *L'Un. Pharm.*, 1891); Veratrum album (examination of the alkaloids by Salzberger, *Archiv.*, 1890).

Under Digitalis, Killian's investigations (1892) are given. Under Podophyllum, investigations of Kürsten (1891) on the active principle (*Achiv.*, 1891) are given.

On the whole the work is to be commended particularly when the fact is taken into consideration that Prof. Maisch's illness and death occurred just at the time when the work of revision had been partly completed.

The encyclopedic character of the Dispensatories makes them indispensable to both the medical and pharmaceutical professions. Of the two works the United States Dispensatory seems to find greatest favor with pharmacists, though a preference for the work is also manifested by a considerable number of medical men who seem to think it contains fuller mention of the unofficial medicinal products, as well as of the substances that might properly be termed rarities of materia medica. However this may be, the United States Dispensatory is a favorite reference book with pharmacists, some using it to the exclusion of any other commentary on the Pharmacopoeia, and in many instances in preference to the Pharmacopoeia itself. A new edition revised in accordance with the Pharmacopoeia has been anxiously looked for, and now that it has appeared its reception has been all that its publishers could desire.

That the work is fairly well abreast of the recent progress in pharmacognosy is shown further on.

The article on Tannin refers to work of J. N. Spence for distinguishing between tannic and gallic acids (*Jour. Soc. Chem. Ind.*, 1891). Reference is also made to recent methods suggested for estimating tannin. The article on Aconite, while comparatively recent, including the works of Dunstan (1891-92), does not refer to the labors of Dunstan and Harrison (Feb., 1893), who showed that napelline has the same composition as aconitine and is termed by them iso-aconitine. This alkaloid is entirely different from the mixtures of amorphous alkaloids, called by the earlier investigators "napelline." Nor are the investigations of Dunstan and Carr on the composition of some commercial specimens of aconitine referred to. These results indicated that nothing but pure aconitine, possessing characters described by them, should be used in medicine (*Ph. J. Tr.* [3], xxii., 55).

The recent work of Merck in isolating the principle adonit from *Adonis vernalis* is given. Likewise the discovery of an alkaloid in Nettle by Oddi and Lomonaco. The subject of Opium is partly rewritten. The color reactions of the more important opium bases, from Allen's "Commercial Organic Analysis," is added. No reference is made to the new alkaloid xanthalin, discovered in 1893.

In considering Curacao aloes mention is made of the work of E. M. Holmes in

1890, that this aloes is obtained from *Aloe chinensis* (Baker), and the fact is also recorded that it was probably mixed with the juice from the leaves of *Aloe spicata* and *Aloe soccotrina*. This has been disputed by S. C. Henriquez, a manufacturer of Aloes at Curacao, who sent specimens of his preparations to the Pharmaceutical Societies' Museum together with some interesting information concerning the process of manufacture (*Ph. J. Tr.*, 1892).

In the article treating of *Arnica montana* we do not find any reference to the recent work on the constituents by Börner (*Apoth. Zeit.*, 1893). Reference is made to the examination of *Aspidium athamanticum* by R. Kürsten (1891). On the origin of Ambergris the work of Jourdain (*Compt. rend.*, 1892), and Beauregard (*Jour. de Phar.*, 1892) are given. Dacomo and Tomasi examined the ferment in *Anagallis arvensis*. This is recorded. The work on Solanaceous alkaloids is not up to date. The importance in distinguishing the leaves of the Solanaceae from each other is observed in the newer illustrations showing the surface characters. No reference is made to extracts prepared from animal tissues. Nor to the *Panac gums*, one of which, *P. Murrayi*, is suggested as forming a suitable substitute for gum arabic.

The recent work of T. Ludy on the origin of benzoin and the constituents of Sumatra benzoin are not recorded. Nor the work of Masson, who extracted two principles, bryonin and bryoresin, from Bryonia. Nor to the labors of A. Mankowsky, who stated (1890) that, while bryonin is inert, bryonidin is poisonous only in large doses (*Ph. J. Tr.*, 1890).

The work of Dunstan and Shephard is given in the chemical identity of caffeine and theine. In considering caffeine citrate the United States Dispensatory says that this is not regarded by chemists as a chemical salt but as a mechanical mixture of the two substances composing it. No reference is made to the results of Schmidt and Gaze, who made examinations upon the action of organic acids upon caffeine. They did obtain a salt of the composition  $C_8H_{10}N_4O_6 \cdot C_2H_4O_6$ , which differed considerably from a mixture of caffeine and citric acid in that it does not lose weight on drying at 100° nor does a solution of the salt in chloroform and alcohol reddens litmus paper.

Under Cannabis indica reference is made of the confirmation by M. F. Smith of the alkaloid described by Siebold and Bradbury. Likewise under Capsicum the investigation of the part of *C. annuum* by Pabst are given. Under Chelidonium the work of König on the alkaloids. Under Cheniaphila an examination by J. C. Peacock. Under artificial Caoutchouc we find no reference to the synthesis of caoutchouc by Tilden (*Chem. News*, 1892). Nor reference to the discovery of carpaine in the leaves of *Carica Papaya* by Greshoff. Nor the results of v. Oefele, who regards Carpaine as the only substitute for digitalis for use hypodermically. This has been further confirmed by Van Ryn (*Archiv.*, 1893).

The article on Chloroform has a number of additions. The article on Cinchona has been rewritten. Under Cinnamon the illustrations have been moved to the test on microscopical structure. The recent works of Hesse and others on the chemistry of coca leaves has not been given. The work on Conium is quite recent. An illustration of Crocus in a coarsely powdered condition is given. The recent work of E. M. Holmes (*Ph. J. Tr.*, 1892) on the examination of spurious cubebs is not given. No reference is made to the labors of Léprince, who dis-

covered a new principle in *Rhamnus Purshiana*, which he regards as the active constituent of the plant and for which he proposed the name cascarine (*Comp. rend.*, 1892). Nor is there reference to the fact that Phipson regards this as identical with the rhamnoxanthin which he extracted from *Rhamnus Frangula*.

There is no reference to the labors of H. Trimble on the tannin of *Castanea vesca* (*Proc. Frank. Ins.*, 1892). Reference is made to the labors of Plugge on *Cerbera odollam* (*Archiv.*, 1893). Champacol is referred to (*Merck's Bull.*, 1893). The most recent chemical investigations of König and Tietz on Sanguinaria are not given (*Archiv.*, 1893). Nor is there any mention of the recent work of Weber (*Archiv.*, 1892) on the oil of cinnamon, which have been further confirmed by Schimmel. No reference to Citrene, being the name under which the terpenes separated from oil of lemon in the production of terpeneless oil is said to be invoiced, and according to Schimmel will form a suitable adulteration for oil of lemon.

In quoting Dr. Rusby's statement concerning different varieties of cocoa two opinions are quoted which are contradictory. While both of these were uttered by Dr. Rusby it would have been wiser to have quoted only the last statement made, which was in the nature of a correction of the earlier statement based upon a more thorough knowledge of the subject gained by subsequent investigations.

The results of the examination of salts of codeine by Göhllich are not given (*Apoth. Zeit.*, 1893). While the quite recent investigations of *Corydalis cara* by Merck and *C. nobilis* by Birsman is given, mention is not made of the labors of Dobbie and Lauder (*Proc. Ch. Soc.*, 1893). The work of Partheil on cystisine and ulexine in *Cytisus Laburnum* and *Ulex Europaea* is given. The recent investigations by Kiliani on Digitalis are given. No reference is made to the discovery of a new alkaloid pseudohyoscyamine by Merck in *Duboisia myoporoides*. It is stated that it is not identical with any other solanaceous base (*Birchete*, 1892). Nor do we find reference to the work of Maiden on the Oleo-resin of *Canarium Muelleri*, together with some notes on Manilla Elemi. The exudation of *Canarium Muelleri* consists of a solution of an amorphous resin in a volatile oil. It possesses no particular affinities to manilla elemi. Ergot has been added to. Eupatorium contains the recent labors of Shamel. Under Grindelia robusta we observe no reference to Schneegan's work on the saponin (*Jour. d. Ph. Etass-Loth.*, 1892).

Under Ipecacuanha there is no reference to the labors of C. C. Kellar in determining the emetine nor to the preparations of Ipecac free from emetine. There is no reference to the labors of Davies and Pearmain on Eucalyptus (*Pl. J. Tr.*, 1892). Nor is there a record of the labors of Post on Helenin (*Schimmel's Bes.*, 1892). Lappa has been added to.

Hefelmann's test for detecting the presence of Bombay mace or of turmeric in mace is given. No reference is made to the paper by T. Stephenson on Jambul (*Eugenia Jambolana*) (*Pl. J. Tr.*, 1892). Nor is there reference to the investigations of Kwasnik on the chemical examination of the essential oil of *Lindera sericea* (*Archiv.*, 1892). Under the toxicology of Male Fern, reference is made to the labors of Katayama and Kamoto. No reference is made to the labors of N. E. Brown on the plants yielding maté.

Reference is made to the investigations of Bertrand and Blanc on the recent

medical and chemical properties of the oil of *Melaleuca vindiifolia*. No reference is made to the labors of Shimoyama and Ono on the ethereal oil of *Mosala Japomea*.

On the subject of Nutmegs no reference is made to work of Marburg (paper read before the Berlin Pharmaceutical Society, 1892) in which he showed that *myristica argentea* comes next to *M. fragrans* and has the greatest possible future (*Ph. J. Trans.*, 1892, 12).

Under Sarsaparilla no reference is made to the extensive investigations of W. v. Schultz on the glucosidal constituents of sarsaparilla (*B. M. J.*, 1892, and *PHARM. RECORD*, Aug. 18, 1892). Wal-lach's recent examination of the oil of sage are given. Also Lyon's examination of Sambucus; Konig's examination of Sanguinaria, and the labors of Cripps on Sandalwood oil.

Article on Scammony is not written according to the investigations of Poleck (*Zts. d. Allg. Oest. Apoth. Ver.*, 1892). Reference is made to labors of Villavecchia and Fabris who have recently examined, chemically, oil of Benne, although no mention is made of the tests applied by G. Ambühl for distinguishing this oil from other oils (*Schweiz Wochenschr. Pharm.*, 1892); nor of the examination of Sesamin by Tocher (*Phar. J. Tr.*, Feb., 1893).

In rewriting the article on Strophanthus no reference is made to the elaborate investigations of E. M. Holmes on examining the Strophanthus seeds of commerce (*Ph. J. Tr.*, April, 1893). Under Senega, Reuter's analysis is given. Under *Sinapis nigra* a number of microscopical illustrations are given. Sumbul has been added to.

Under Yew no reference is made to labors of F. J. M. Stuart Wortley who found that taxine is contained chiefly or entirely in the male plant (*Ph. J. Tr.*, 1892). An illustration of *Veratrum viride* is given.

The dispensaries are works of paramount usefulness to both physicians and pharmacists, and no pharmacist should undertake the conduct of a pharmacy without possessing at least one or the other of the two standard publications.

### Distilled Water.

Some three years ago the New York Academy of Medicine induced the Board of Health to investigate the conditions of the supply of distilled water at the retail drug stores in this city.

The physicians claimed that when they ordered *distilled* water in prescriptions the druggists did not dispense distilled water. As a result of the investigations of the Board of Health it was found that by much the larger proportion of water purchased by retail pharmacists as distilled water contained notable quantities of impurities.

It was found that in many instances the manufacturing druggist did not have a separate still for the distillation of water, but merely condensed a portion of the waste steam from his power boiler, thus getting a very impure product. In one instance water bought from a concern not pharmacists, making a specialty of selling distilled water, proved impure.

If a druggist wants to get really pure water, therefore, the only absolutely safe plan seems to be to distill it himself.

This is the plan pursued by H. N. Fraser, the widely-known Fifth avenue pharmacist, who was recently re-elected treasurer of the New York College of Pharmacy.

Mr. Zimmerman, who has charge of the

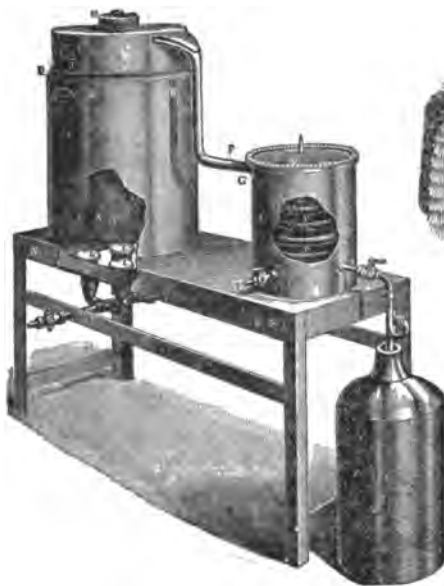
analytical laboratory on the fourth floor of the Fifth avenue store, courteously showed the writer a new water still which they have recently put in.

This still which is illustrated herewith is one of the most practical and satisfactory, so Mr. Zimmerman says, that he has as yet had any experience with.

The still is constructed in the most simple and substantial manner in every detail. Among the features of special value are the burners for heating and the condenser. Mr. Zimmerman states that when once in operation, and it takes but a few minutes to get it going, the still will turn out a perfect stream of condensed water.

This is done, too, with a remarkably small consumption of gas and of water for cooling.

The still itself is made of copper, lined with tin, while the double, non-conducting



THE CURRAN WATER STILL.

jacket around the fire box insures the most economical utilization of the heat generated.

Aside from the purely pharmaceutical uses for distilled water there is a growing appreciation among the public of the necessity of using pure water for drinking, and distilled water is of course the purest possible form of the liquid.

The still is made by the Jas. Curran Mfg. Co., 512 and 514 West Thirty-sixth street, New York City, who will send more detailed descriptions if this journal is mentioned when writing them.

### Bath Brushes and Civilization.

"Tell me the Number of Bath Brushes, used by any nation, and I will tell you its degree of Civilization."—PHILOSOPHER

The friction brush is by no means of modern origin, being old enough to excite the envy of any of our Four Hundred. We find the cartigis (friction brush) mentioned in the glorious days of Rome as a requisite to the sleeping chamber and the bath of the patrician.

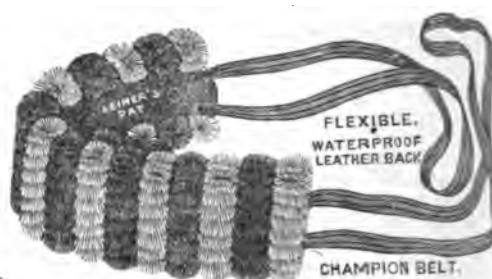
Later on it seems to have been among the lost arts, even to the times of that fa-

mous Duke of Argyle who, according to a popular tradition, was on one occasion in a very awkward predicament for the want of a flesh brush. But, as Rudyard Kipling says, "that is another story."



If you want that story write to M. Leiner, brush maker, Philadelphia, for it mentioning this journal and he will send it to you. Mr. Leiner has just gotten out some very interesting reading matter about some new brushes that he has recently placed on the market.

These brushes have the bristles twisted in wire, not drawn, and are therefore more durable, give better friction, are guaranteed both for wet and dry use, and sell quicker than any other make.



They have the distinction of being the only American made brushes that sell in England, the home of brushes, all over Canada and South America, etc. Surely they must have some merits not possessed by others.

The accompanying illustrations show two of these new brushes that are of special interest.

The first has a light wood, round body with black and white brush firmly attached to a long curved handle suitable for a bath brush.

The second consists of 15 rows of brushes mounted on a flexible leather water-proof back with strap handles.

### The Martindale Herbarium.

At a meeting of the board of trustees of the Philadelphia College of Pharmacy, held April 3, 1894, Howard B. French, on behalf of himself and the Smith, Kline & French Co., who had jointly purchased this world-renowned herbarium, presented it to the college, with the request that it be retained intact as the "Martindale Herbarium."

The gift was accepted by the board of trustees, who felt that it was a great acquisition to the college, and they directed that engrossed resolutions, expressing the sense of the board for the generous gift, be presented to the donors and a copy of same be framed and placed in the library of the college.

The collection will be kept entirely distinct from that already owned by the college, and will be known as the "Martindale Herbarium, presented by Howard B. French and the Smith, Kline & French Co."

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record*

### How to Avoid the Accumulation of Dead Stock.

By JNO. W. BALLARD,

Davenport, Iowa.

#### BUYING.

"An ounce of prevention is worth a pound of cure," an axiom as true in business as in medicine. How much to buy of this or that is one of the unsolved problems in everyday merchandising. The subject has racked the brain of the manufacturer, the importer, the jobber and the retailer. To be able to determine what the demand will be for any article, especially those

gether with the necessary insurance risk, buy the smaller quantity, for the dead stock item must not be forgotten even in staples.

#### SELLING.

In spite of all our caution the shrewdest buyer will get some goods that move slowly. If they are strictly holiday goods as soon as the season's sale has fairly closed carefully put them away where no one will see them until next year, they can then be displayed again as new. The second year should dispose of them. If you have any fears that they will not move make a low price on them, have them plainly marked and placed in your show window before the holidays. Many persons want to purchase something the price of which will correspond with their means and the price plainly marked on a showy article will often sell it. If the article is shopworn always accept the first reasonable offer for this reason—few people will make a present of soiled articles.

In many back rooms and cellars you will find a box full and running over with old wide-mouthed bottles in which chemicals have been purchased—an unsightly corner. Dead stock? Need not be. Buy a hundred pounds of chloride of lime for \$8, fill up these now unsightly relics and put on them an at-

out, they will then be brought to your mind when an opportunity comes. In doing this you will come to some where you will have to draw the line. Do not recommend any so-called medicines that you are well aware are swindles. If they are called for sell them, otherwise set aside as you would counterfeit money to look at occasionally. Simply as a reminder to be more careful next time.

#### A JOKE ON A PHYSICIAN.

I will mention some other ways that have been resorted to, but without recommending them. In the early days of sugar-coated pills a quantity of various makes of cathartic pills were stored in a place which proved to be too damp for the coating as then made, and the result was several gross of spoiled pills. These were all made into one mass and rerolled, podophyllin added, so that each pill contained  $\frac{1}{4}$  grain, boxed and sold for anti-bilious pills. An actual joke on this combination was that a physician (?) got to using these pills, and when he moved away he wanted to get the recipe, so that he could get them made in his new home.

#### A KANSAS EXCHANGE.

A *dernier resort* may be learned from the following: During his business career

### LADIES AND GENTLEMEN,

I speak from personal experience. I can assure you that morning headaches, aching shoulders, and pains after eating vanish as if by magic after a few doses of

BLANK'S

### LIVER-PILLS

They are perfectly safe, for they contain no minerals. They are mild in action. They are pleasant to take, being sugar-coated. And they cost but a shilling a box.

**BLANK,**  
CHEMIST,  
HIGH ST., DULLTOWN.



### You might well Look troubled, Doctor.

People won't take your nauseous physic now. A shilling box of Blank's Liver-pills does as much good as half-a-dozen bottles of old-fashioned medicine, and, being sugar-coated, they are easily taken, too. Good-bye, Doctor, I'm off to

**BLANK'S,**  
**CHEMIST,**  
DULLTOWN.



Specimen Advertisements from the London Chemist and Druggist.

that are new and novel, is a most difficult thing to do. New remedies, toilet articles, and fancy novelties are constantly brought to our notice, and while some are almost stillborn yet many have a vigorous life and to keep up with the procession we must have them. Therefore, I claim that it is in keeping with good business principles to put in stock new things. Should they prove to be good sellers it is a good point made to be the first to have them, but in putting in new articles *always* observe this rule: Make your first purchase a small one. Better to use the telegraph and express to replenish your stock than to have unsalable stock left on hand. Buy with special care of the elixir of seven chlorides combined with three iodides, which the agent represents as being a remedy used by all leading surgeons in the East, and which Dr. Blank of your city thinks he will use and says he will send his prescriptions to you for it.

Very many staple articles are now sold on the "Rebate Plan," the quantity purchased at one time determining the price. In the purchase of these we may estimate that future sales may equal past sales, and this may be a safe rule to follow. If the rebate allowed does not exceed the interest on the investment to-

tractive label, and your bottles will soon be sold, and what is more you will find your customers will want the lime that is put up in bottles instead of the usual carton because it is always good.

At the close of the war a certain druggist purchased at auction a lot of hospital stores, and among them some 300 pounds of opodeldoc of a well-known manufacturer's make—pretty large stock for a retailer. He added to this some good oils and alcohol, put up in panel bottles as "Nerve and Bone Liniment," and the opodeldoc was soon sold and more made, and that store still has a good sale for the liniment that originated in this manner.

#### AVOID SWINDLES.

Patent medicines sometimes sell for a time rapidly, the advertising is stopped and the sale of them is at an end. Correspond at once with your wholesaler, there may be a demand for them somewhere in his territory, and to accommodate you or for a slight percentage you can exchange for other goods. Or they can be sold bottle by bottle when some one calls for "something good for a cough," or "Give me a bottle of blood purifier." Have one place in your store to put all remedies that you wish to close

a druggist had purchased three other stores and moved them, stock and fixtures, to his own, and as such stocks usually have plenty of chestnuts, be sure there was a collection when they were all together. During a dull season these were all sorted out, boxed up and a regular invoice made of them. In this place—and I presume it to be the same in other places—there are always trading people who want to sell you city lots, Western land, etc., etc.

This stock was always offered to these parties and served a good purpose to drive many of them away. But, strange to say, the truth of the saying "if you will keep a thing long enough somebody will want it" was illustrated in this case, for a party with a house lot for capital wanted just such a stock, and only wanted cash enough to ship it to Kansas.

It proved to be a good exchange to both parties—to the druggist, for he realized on stock to him "dead," and to the real estate dealer, for it settled the price of his lots, and his sales of them from that time on were rapid. The medicines were shipped to Kansas, but Providence showed its mercy to the people of that much troubled State by destroying them utterly with a cyclone. Therefore, all other means failing, try Kansas.



## English Ideas of Advertising.

John Bull is a stolid, sturdy old gentleman, and when he goes in for advertising he carries his personality with him. Even when he is funny, or thinks he is his fun is apt to be somewhat ponderous. A liver is a serious thing—when you know you have it—but it is made a jest of by many contributors to a contest now being carried on in the London *Chemist and Druggist*, as to the best method of advertising Blank's Liver Pills. We publish some of the advertisements in this series on this and the preceding page though not exactly as examples to be followed by one desiring to increase his business.

## Some Queer German Advertising.

The *Pharmaceutische Zeitung* of Berlin, which is issued twice each week, is one of the most valuable and widely circulated pharmaceutical journals of the world. Besides its valuable reading matter it contains a most interesting and heterogeneous mass of advertising. The advertisements are for the most part small and their display wretchedly inartistic.

A favorite method of attracting atten-

## In Lieu of All Other Notification.

There departed early to-day at 6, after long and painful illness, my beloved wife, our true mother, stepmother and grandmother,

born Minna Wilm, Frau Drager,  
in the 47th year of her life.

IN THE NAME OF THE MOURNING STAY-BEHINDS,  
CARL WILM,  
Corps Apothecary xv Army Corps,  
Strassburg in Elsass, 27th January, 1894.

Cupid, too, as well as Hymen and Mors, furnishes his quota of advertisements, for we find the notice of an engagement alongside of the advertisement of a bacteriologist, while following it is an announcement that

A young widow, owner of an apothek, wishes to correspond with a competent Catholic pharmacist, with a view to matrimony later. Please address; if possible with photograph. Ph. 5380, care *Pharmaceutische Zeitung*. Utmost discreetness.

That the young widow is not above the frailties of the flesh is indicated by the request for a photograph. But for the unfortunate difference in religious faith the widow need not have looked far to find a

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 20 to June 28, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

FOURTH PRIZE.—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer

## LISTEN TO ME!

If you would live to a ripe old age, and be healthy right along, remember this fact.

## BLANK'S LIVER-PILLS

Are the very best remedy you can have for the many ailments arising from a disordered liver or impaired digestion. Try a box today. They cost but 1s., and

WILL SAVE YOU  
POUNDS.

SOLD ONLY BY

BLANK, CHEMIST,  
DULLTOWN.



## AFTER THE BAWL!

—If it's like this one—you'll be sure to have a headache. A dose or two of

## BLANK'S LIVER-PILLS

Will quickly remove it.

You will remember, too, that the question "Is life worth living?" depends upon the liver. This troublesome organ is kept well up to its work by these pills.

Sold only by

JOHN BLANK,  
CHEMIST,  
DULLTOWN.



Specimen Advertisements from the London *Chemist and Druggist*.

tion to an advertisement is the use of heavy-solid black borders such as would not be tolerated in an American journal of even the poorest class. These borders being sometimes a full quarter of an inch wide on an advertisement only 2 inches square.

It is not alone in the typographical display that the *Zeitung*, and in fact all the German papers, arouse the wonder of the American reader. In one issue, for instance, appear a number of advertisements of the various students' societies inviting the members to attend the "semester-schlusskneipe," or final beer drinking-bout of the session. The term beer drinking-bout, however, while it conveys nearly the literal facts as regards the celebration, sounds rather coarser than the affair warrants. The Germans are quite public in their personal affairs also, and as a consequence we find in the *Zeitung* under the heading "Family News," advertisement, to this effect:

BORN—A daughter to Herr Apotheker Jänigen in Mülheim.

They not only welcome the coming but, as it were, speed the parting in public print, for we find mixed in with miscellaneous advertisements the following with appropriate turned rules. The original is two columns wide and three inches deep, and is, of course, in German, though as is universally the case in scientific publications the Roman and not the Gothic letters are used:

suitable match, for the very next advertisement following hers reads thus:

## MARRIAGE.

For a well-to-do owner of an Apotheke, Evangelical, 30 years old, a suitable match is sought; means desired, but not absolutely required; no anonymous offers.

Imagine the sensation that such advertisements would create in an American class journal!

Though enterprising as to the reading matter, the *Zeitung* is singularly conservative in its advertising department, the bookkeeping being simplified at the expense of the appearance of the paper by the insertion of a serial number in each advertisement, as 5,384, 5,385, etc.

## A Chinese Advertisement.

Very good ink, very fine, very old shop; grandfather, father, and myself, make this ink; fine and hard; picked out very fine and black, before and now. Sell very good ink. Prime cost is very dear. This ink is heavy; so is gold; no one can make like it; the others that make ink do it for money, and to cheat. I only make it good for a name. Plenty of gentlemen know my ink. My family never cheat. Always a good name. I make ink for the Emperor and all the mandarins round. All gentlemen must come to my shop and know my name.

UNGWANCHI LUCCE.

to every one of the questions published in the series making an average of 66 per cent.

THE results of the examination of the first series of answers shows that the Quiz Box will prove of even greater value than the editor had hoped.

The benefits to be derived from participation in the contest are being appreciated by all classes of pharmacists and students. Some of the contestants are graduates in pharmacy, some are apprentices; some have grown gray in the service of Galen, while others are just taking up his burdens.

Among the students—for all earnest people are students however accomplished and learned they may be—are some of the fair sex, two of whom reached a grading of above seventy-five per cent. as is shown by the publication of their names in the following list.

Some of the class put at the head of their papers a statement that they have received no assistance in the compilation of their answers, either from books or from other sources. We presume that all could make this statement without reservation. It is only by so answering the questions that the greatest benefit will accrue.

It is unnecessary to use very heavy or expensive paper to write the answers on,



and it is not necessary to repeat the questions with the answers. Have the paper used of uniform size, write on one side only, and prepay the postage. Many of the replies submitted weighed over the limit of 1 ounce, and the extra postage had to be paid at this office.

Nos. 5 and 11 of the first set of questions seemed to cause the most trouble. While these questions are not, strictly speaking, practical ones, they are just such as are asked in junior college examinations, and their comprehension will aid toward more perfect understanding of much that is written concerning pharmacy.

The answers given here are necessarily very brief, and better or more complete answers might be given to some of the questions but for space limitations.

### Answers to Questions 1 to 15.

(1) Physics is that part of science which treats of the results which flow from the molar and molecular conditions of matter.

(2) Chemistry is that branch of science which treats of matter in its atomic condition and the changes which it undergoes within the molecule.

(3) Botany treats of the vegetable kingdom, the structure of plants and their classification.

(4) Pharmacognosy treats of the natural origin, structure, and other means of identifying organic drugs.

(5) Pharmacology treats of the physiological action of medicinal substances.

(6) Pharmacy is the art of selecting, preparing, preserving, and dispensing medicinal substances.

(7) *a.* That branch of medical science which treats of the nature and properties of all substances used as medicines, or in the cure of diseases. *b.* All materials or substances used as medicine in the cure of diseases.

(8) Therapeutics is that branch of medical science which treats of the application of medicinal substances to the relief or cure of disease.

(9) Posology treats of the proper doses of medicines to be administered.

(10) Metrology is the study of weights and measures and of their relation to each other.

(11) Physical incompatibility is the dissociation of one or more of the constituents of a mixture without chemical action—*e.g.*, the addition of alcohol to mucilage of acacia, or of water to tincture of myrrh.

(12) Glycerin is obtained by decomposing fats by steam under pressure and as a by-product in the saponification of fats. Its formula is  $C_3H_5O_3$ . General impurities are calcium and soda salts, sulphuric and hydrochloric acid.

(13) When ammonium carbonate is added to syrup of squills, carbon dioxide is liberated and some ammonium acetate formed.

(14) Donovan's solution is a solution of arsenic and iodide of mercury.

Fowler's solution is a solution of arsenite of potash.

Clemen's solution is a solution of bromide of arsenic.

(15) Creosote is obtained by the destructive distillation of wood. Creosote in alcoholic solution will produce a greenish blue color with solution or tincture of iron; carbolic acid under like condition forms

a brown solution. Carbolic acid will coagulate collodion; creosote will not.

### Names of Students whose grade stood 75 on questions 1 to 15.

W. J. Adams, Manchester, Va.  
E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. Wm. L. Becker, Dubuque, Iowa. Heywood Boone, Clinton, Ky. Brenneman, Harrisonburg, Va. John W. Brewer, Lake Preston, S. D. Roscoe J. Brown, Camden, N. J. W. E. Bruce, Boston, Mass.  
Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Lester Carde, Woonsocket, R. I. Henry E. Culbert, Newark, N. J. Chas. S. Clark, Shamokin, Pa. Chas. S. Cogley, Lowell, Mass. W. S. Collin, Mitchell, So. Dak. W. F. Craig, Indianola, Miss.  
A. P. Davis, Redwood Falls, Minn. J. C. Dague, Fredericktown, Ohio. T. I. Derryberry, Centerville, Tenn. F. L. Dolan, Freeman, Mo.  
Louis Fickler, New York City.  
John J. Grogan, Warren, Mass. William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.  
L. Harding, Fergus Falls, Minn. Frank Hartmann, Middletown, Conn. H. B. Harrop, Columbus, O. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. H. Heinzel, West Superior, Wis. F. G. Hill, New York City. Seymour, Hull, Hoochuck Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.  
Wm. L. Knuth, Springfield, Ohio. F. W. Krehbiel, Dayton, Ohio.  
J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. C. W. Linch, Lewisburg, Pa. M. D. L'engler, Philadelphia, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawer, Schenectady, N. Y.  
C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. T. L. Mills, Boston, Mass. Arthur, Mouri, Houghton, Mich. Thomas J. Murphy, East Bradley, Pa. John R. Murray, Centerville, Tenn.  
W. B. Nethery, Toronto Junction, Ont. Ralph L. Nye, Skowhegan, Me. John T. Ogle, New York City.  
Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.  
T. I. Quirin, Santa Clara, Cal.  
A. V. Rand, Wolfville, N. S. M. E. Read, Waukegon, Ohio. Paul F. A. Rudineck, Chicago, Ill.  
C. D. Sauvint, New Orleans, La. Clinton Sellers, Kencordino, Ontario. Wm. E. H. Schneider, New York City. Edgar B. Scott, Norfolk, Va. J. McDonald Scott, Chicago, Ill. William W. Scott, Highland Falls, N. Y. W. A. Sichel, Sewn Shoe, Pa. L. W. Simonds, Providence, R. I. Alber Z. Smith, Clarksburg, W. Va. Clarence D. Snaveley, Lebanon, Pa. Moses W. Somers, Boston, Mass. A. W. Walter Spingler, Toronto, Ont. Dan G. Sullivan, Holyoke, Mass. Walker L. Stephens, Philadelphia, Pa.  
Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter A. Tichenor, Brooklyn, Miss Edith Tompkins, Jasper, Fla.  
W. H. Van Strander, Winsted, Conn. Chas. G. Vernon, Florida, N. Y.  
M. D. Martin, Redwood Falls, Minn.  
Bertie Ward, Orange, N. J. Miss Emma A. Wiggin, Exeter, N. H. Wood Wiles, Bloomington, Ind. John S. Wilson, Philadelphia, Pa. H. A. Woodward, Plainfield, N. J.

### Questions; Fourth Series.

46. Give the six distinctive organs of a complete, perfect flower?

47. What is the difference between a regular and a symmetrical flower?

48. What is the difference between an incomplete and an imperfect flower?

49. What is a sessile stamen?

50. What is meant by monandrous? and what by a polyandrous flower?

51. What is pollen, and what is its function?

52. What is a style?

53. What is a stigma?

54. What is meant by monogynous, and what by hexagynous?

55. What is meant by a gymospermous pistil?

56. What parts of plants are generally used in medicine?

57. To what are the medicinal virtues of plants generally due?

58. Describe the difference between the root and the stem of a plant?

59. Licorice: (a) Where is it found? (b)

What part is used? (c) What are its medicinal properties and official preparations? 60. Give five saline aperients with their doses.

### Death of Brown-Séquard.

Charles Édouard Brown-Séquard, the distinguished French physiologist and *savant*, died at Paris on April 2. He was born on the island of Mauritius April 8, 1817. His father was a sea captain from Philadelphia, who married a French lady named Séquard. The son was sent to Paris in 1838 to complete his medical studies and received his degree in 1840.

From 1864 to 1869 Brown-Séquard occupied the chair of Physiology and Pathology of the Nervous System in Harvard College. From 1869 to 1871 he filled a professorship in the School of Medicine of Paris. In 1873 he removed to New York, but he returned to Paris in 1878.

### Better than a Discount.

Williams, Davis, Brooks & Co., in their illustrated advertisement occupying a half page in this issue, call attention to an exceptional offer which they are now making with a view of interesting the retail trade in Dabrooks' Perfumes. This is the giving away of one dozen handsome lithographed cards in colors with each order of Dabrooks' Perfumes to the amount of \$12. Each card contains three bottles of perfume and is equivalent to a 25-per cent discount on the purchase required. Why not send a trial order.

### Non-Secret.

Attention is called to the advertisement of Frederick Stearns & Co. on page 12, Retailers who wish to add a select line of non-secrets to replace some of the expensive goods of the patent medicine dealers should lose no time in writing to Frederick Stearns & Co., Detroit, Mich., for a catalogue and price list.

### How to Advertise.

Have you something to sell? If so you should advertise it and if you are going to spend money in advertising you should be sure to get your money's worth. Nothing is so difficult to determine the value of as newspaper advertising space. In nothing does the price depend so much upon the purchaser. An expert can get better returns with half the expenditure than can one not an expert. He saves you money. His services cost you nothing. If you have anything to advertise, especially to the public write to A. R. Elliott, 37 College Place, about it. He is an expert maker and placer of advertising.

### Elegant Pharmacy.

As vehicles for the palatable administration of powdered drugs, the Konseals of J. M. Grosvenor & Co., 103 Milk street, Boston, present many advantages over the pill and capsule. The Konseal is an improved modification of the French cachet, and, like it, is made of rice flour and water. The Konseals are prepared in six sizes with capacities varying from one to eighteen and one-half grains (quinine or salicylic acid). The makers refer to them as being convenient in form, absolutely soluble, elastic, tasteless, perfectly digestible and capable of remaining unimpaired by climatic changes for years.

## SHALL WE ORGANIZE UNDER THE "LEAGUE PLAN."

Even retail druggists in the New England States should carefully read the following and be prepared to take immediate action.

If the retail "fraternity" of this country ever expect to better their condition, which, it seems to us, is fast assuming a deplorable one, it is high time they immediately organize under the "League Plan."

We do not mean during the coming year, neither at convenience and leisure any time this summer, but this present month of April before the annual meeting in May is the proper time. This opportunity with all its accruing benefits has constantly been offered you for more than a year past, and many sections that have fully realized the benefits to be derived and perfected their organizations long ago will not always have patience to wait for the benefits they should have realized, perhaps a year or more ago, had each section done their duty under this privilege—for privilege it certainly is as now perfected and offered to you.

It seems to us that a retail pharmacist has not learned the first principles of his business until he has become thoroughly aware that a fair, legitimate pharmacy business must be supported by margin rather than volume of business. Of course there are rare exceptions as there are to all rules; but if you discriminate closely you will discover they are mainly outside of what we define as "fair and legitimate." For instance, the illegitimate sale of liquors and the cut price system, which is the pirating of one upon many others, etc.

We must all admit we have departed far from this fundamental principle, when we have arrived at a position where it becomes necessary to sell a large portion of our merchandise practically at cost in order to prevent such pirating. The remedy lies only in organization, and now is the time to organize.

We have in President Canning a master mind, an efficient general, one who grasps the full situation and keeps the whole machinery running smoothly. During his first presidential year (which we trust will not be his last) he has devoted a large portion of his time to the work with persistent, untiring energy; and, what seems most commendable, this work has been done wholly in the general interests of the fraternity from an entirely unselfish motive, as his individual business is such that he has no-tenth third the average interest in the benefits to be derived.

Mr. G. W. Cobb, the first president of the newly formed organization, "Retail Druggists' Union," for the purpose of organizing the balance of the New England States under the "League Plan," has also devoted a large portion of his time the past year to the commendable work and is now laying plans for a systematic and thorough canvass of those sections not already organized. So many other persistent, energetic workers deserve equal credit for their part so well and faithfully done that it is hardly fair to mention names; but these two are

mentioned, as a matter of information, on account of their official positions.

Now when the opportunity is offered will each druggist in the New England States second these gigantic sacrifices and efforts, come forward and do their part, and accept of the large remuneration to follow?

The close thinkers in the fraternity, as a rule, have seemed to arrive at the conclusion that redress from the vexed cut price problem must emanate from and be sustained by the manufacturers of proprietaries, and many have not familiarized themselves with the present movement sufficiently to be aware that this is the basis of the "League Plan."

The plan not only has the approval and general support of the manufacturer, but combines his pecuniary interest to the greatest possible extent, for, if carried out in its full extent, will in a great measure stop that fast growing and to him ruinous practice of substitution.

The plan also has the approval and support of the jobbers and combines their pecuniary interest to the extent that it recommends all outputs through the jobbing druggist only and all rebate privileges to stop with him also.

To this position some retailers at first objected; but the objection does not attach when the full situation is thoroughly understood. Even if a person still holds to the position that it is a slight objection, do you expect so great a good without some small effort and sacrifice? And this movement, or any other, in order to be a perfect and thorough success, must combine the interests and good will of all the interested parties and invite the antagonism of none.

Let us for a moment examine into the advantages and disadvantages of this concession, which is the one only apparent objection to the whole plan. In the first place it puts all retailers, including cut price and apartment stores, upon an equal footing in all their purchases. Advantage No. 1. Do we hear any one say we lose the opportunity of saving 10 per cent. in our purchases?

Would any one claim for a moment that the average retail druggist ever purchases 10 per cent. of his merchandise direct? We think not, and this basis of figuring reduces the saving to 1 per cent. when applied to the masses, which is the correct standpoint, for we must sink individuality for the success of this magnificent cause. Now, compare this with the benefits of being placed upon an equal footing with the cut price and apartment stores, for fully competing with them in selling price, to say nothing of the 20 per cent. and upwards we will surely get by the re-establishing of prices. No, there is nothing valid in this objection when considered in its entirety.

You must not for a moment lose sight of the great necessity of joining the "League" after your local association is formed—not but that great good may be derived from local associations alone, but in order to insure perfect success in this movement we must make it national in its scope, then we can ask for anything in reason knowing it will be conceded whether it be with a perfect willingness or not. Besides, all the plans are laid and well laid for carrying out the work in detail, with competent heads to the

different departments, and it only costs \$1 a year for each member, which allows him to participate in all the benefits.

The "League Plan" combines all the necessary elements for success; the officers are the right men in the right places!

All we now lack is a complete branch in each county. Let us be able to report the accomplishment of this at the annual meeting in May.

We hope through the medium of the "Retail Druggists' Union" to offer the necessary aid to each county before that date; but should the contract be too great for the "Union," anyone can obtain all the necessary blanks and instructions by applying by letter to either G. W. Cobb, president, East Boston, or C. P. Flynn, secretary, South Boston.

Therefore, do not let the time pass without effecting a complete organization in your county and have a representation at the annual meeting of the "National League," of which due notice will be given in the pharmaceutical journals. The penalty of a neglect to do so may be a repetition of the past few years and perhaps even worse.

Respectfully submitted in aid of the good cause.

N. W. STILES,  
President Apothecaries' Guild  
of Boston and vicinity.

Boston, April 7, 1894.

## Boston.

William J. Cutler, formerly senior partner in the firm of Cutler Bros. & Co., Boston, died at his residence in this city April 1 from heart disease. Mr. Cutler's death was particularly sad, he having assisted in a church service a short time prior to his going to his residence, where he was almost immediately stricken down with this malady. He was born in 1815 in Winchendon, Mass. About 1829 he came to Boston and entered the drug store of Lowe & Reed, Merchants' Row. The firm afterward moved to Chatham street, and Mr. Cutler was given a partnership, doing business under the name of Reed, Cutler & Co. The business was after a time moved to India street, and combined, by purchase, with that of Reed, Austin & Co. During the war the business was transacted at 109 Broad street, and it was subsequently moved to 89 Broad street, the present quarters of the firm of Cutler Bros. & Co. Mr. Cutler retired from the drug business two years ago last July. He was a member of the Wholesale Druggists' Association of Boston, a member and the second president of the Boston Druggists' Association, and a founder and director of the First National Bank of Boston. Upon the announcement of the death the Wholesale Druggists' Association met and adopted the following resolution:

We are reminded by the very sudden and unexpected removal of our friend and associate, Wm. J. Cutler, from this life to that of the immortal life beyond, of the great uncertainties that surround us.

That as the active business representative of an honored house for many years, he was widely known and esteemed.

He was a living illustration of high devotion to the high principles which were the foundation of his faith and character and which dominated his life and conduct.

Therefore Resolved: That we, the wholesale druggists of Boston, unite in expressing our appreciation of the high character of the late William J. Cutler, and our sense of loss at his being taken from us.

That in the great mysteries of life we most sympathizingly commend his family to the Great All-Wise, who doeth all things well, and in whose keep

ing our beloved ones are always safe, though for the white separated from us.

That these resolutions be transmitted by the officers of this meeting to the members of his family.

*Resolved:* That as a token of respect to the memory of our late associate, Wm. J. Cutler, we close our places of business during the hour of the funeral.

The above association also appointed a committee consisting of Messrs. Andrew G. Weeks, Benj. J. Wilson and Charles A. West to attend the funeral.

A special meeting of the Boston Druggists' Association was also held and Messrs. Thomas Doliber, Joseph Burnett, Nathaniel J. Rust and Theodore Metcalf were appointed to represent the organization at the funeral; the following resolutions were also unanimously adopted by a rising vote:

*Resolved,* That as members of the Boston Druggists' Association, as well as on behalf of the trade which we represent, we desire to place on record our appreciation of the life and character of William J. Cutler, a member of this association from its organization and at one time its president.

That we recognize the comprehensive and executive ability which characterized his faithful devotion to the public and private interests of his calling for more than sixty years.

That we gratefully bear witness to his firmness of purpose, his ready friendliness and helpfulness to others, his courtesy, his absolute integrity and his spotless character.

That we tender to Mr. Cutler's family our sincere sympathy in a sorrow which we share with them.

That a copy of these resolutions be furnished to Mr. Cutler's family and to the press.

Mr. Edward H. Cutler, a son of the deceased and a member of the firm of Noyes Bros. & Cutler, St. Paul, Minn., was summoned by telegraph and arrived in time for the obsequies, which were held at the New Jerusalem Church on April 5.

The pall bearers were: John Carr, president of the First National Bank; Gorham D. Gilman of Gilman Bros., representing the Wholesale Druggists; Theodore Metcalf, representing the Retail Druggists; David L. Webster of the Hide and Leather Bank, Judge Mason of the Supreme Court, Francis Dewson, Rev. Samuel N. Warren, Charles Reed.

The last meeting of the Boston Druggists' Association was known as "A Chestnut Night." The post-prandial exercises were inaugurated by President Babcock's reading of "Notes on Nuts," an original poem adapted to the occasion. A clever sketch, "The Chemist's Cat," revised and re-written up to date, was also read by the president. Henry Canning followed by reading "The Chemist's Boy." Anecdotes were then in order in which the following members participated: Thomas Doliber, Amos K. Tilden, Prof. Markoe, Henry M. Whitney, William A. Chapin, Henry Canning, Freeman H. Butler, C. B. R. Hazeltine and D. A. O'Gorman. A story founded upon David and Goliath was read by Mr. O'Gorman, which closed the exercises of the evening. Albert L. Wyman, J. Allen Rice and Charles W. Cheney were elected to membership at this meeting.

President Cobb of the New England Retail Druggists' League will soon acquire the cognomen of the lightning organizer. He made a trip to Northampton recently, and in almost less time than it takes to tell it he had effected an organization of the druggists of Hampshire County with officers as follows: President, Lucius Davis, Northampton; vice-president, C. J. Smith, Amherst; secretary, Henry Adams, Amherst; treasurer, L. Parsons, Northampton; directors—A. G. Cone, J. D. Smith and W. A. Coburn. Sixteen of the twenty-five druggists were present, and all will soon be enrolled in this body. It was voted to join the Interstate League as well as

President Cobb's organization, the N. E. R. D. U. President Cobb is enthusiastic over the rapid way in which the organization is progressing. He has assurances that Haverhill druggists are developing an interest in the movement to such an extent that the whole county will soon be organized into one association.

March 29 ended a three days' session of the Massachusetts board of registration in pharmacy. Of the 48 applicants examined the following received certificates: William B. Milliken, Cambridge; William Hardie, Boston; Patrick A. Dolan, Natick; Ernest H. Bailey, Northfield, Vt.; Richard F. Smith, Lawrence; George H. Powers, Holyoke.

C. E. George, East Boston, will in the future serve his customers with soda drawn from the new onyx fountain "Boston," which he has purchased from James W. Tufts & Co.

F. M. Frost has opened a new store at Rosindale which is furnished with a Low Art Tile Co. fountain.

H. J. Bass, 165 Cambridge street, has a new Low Art Tile fountain.

### Chicago.

The much agitated subject of cutting gives promise of an early solution if the views of some of the leading Chicago druggists as expressed to a representative of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD are to be backed up by intelligent and energetic work. The plan which they propose to put into operation is practically the same one that was suggested a few months ago by the representative of the Universal Trade Association of Detroit, N. Hayes, who visited this city on several occasions recently but who failed to make a favorable impression owing more to the fact that his plans were not well matured rather than a lack of interest or a suspicion that he was trying to involve the druggists in a scheme that would accrue to his personal benefit.

Later Mr. Hayes visited St. Louis where he endeavored to interest the pharmacists of that city in his plan. He was accorded a good reception by those he visited, but he seems to have made the same mistakes there that he made in Chicago—viz., soliciting subscriptions to the capital stock of the association and collecting money before he had organized for operation. In both instances he excited the suspicion of some of the more cautious druggists who without giving the plan due consideration denounced it and its promoter. The attention of the daily press was called to the matter and the papers gave Mr. Hayes a write up which characterized him as a fraud.

In presenting his plan to the Western pharmacists Mr. Hayes told them that it had the hearty indorsement of the leading manufacturers of the country. He also insisted that it was supported by the druggists of Detroit. A cursory investigation made by the Chicago Retail Druggists' Association and Mr. Thomas Layton, president of the St. Louis Apothecaries' Association, it is claimed, failed to substantiate Mr. Hayes' statements, and in the latter city the Universal Trade Association's plan was dropped like a hot potato.

The Chicago druggists were more favorably impressed, not with Mr. Hayes or his methods of introducing the plan but with the plan itself. They saw in it a scheme of considerable merit, and being anxious to adopt something that would better the

condition of trade they gave the matter further consideration, which now promises to develop something tangible and practical in the direction of ameliorating business.

The Universal Trade Association is a concern capitalized for \$1,000,000 whose headquarters are in Detroit. The objects of the association as set forth in their prospectus are as follows:

The Universal Trade Association is a corporation composed of retail druggists of this country for the purpose of manufacturing and selling patented labels, such as are shown in the cuts herewith annexed, to be employed on proprietary preparations. The control of these labels in the United States is to be delegated to an association of retail druggists, called the United Trade Society, into whose hands will be placed all the power necessary to put the plan into effect, and the supervision of the details of its practical operation.

Among those who became interested in the plan were Henry Goetz, Mr. Semple of Dale & Semple, E. Von Hermann, A. E. Ebert, and others of equal prominence. These gentlemen were instrumental in having the plan brought before the local association, where it met with some approval. Notwithstanding the apparently strong indorsements Mr. Hayes had exhibited it was thought prudent to make something in the way of a personal investigation before taking active steps, and Messrs. Goetz and Von Hermann were constituted a committee which visited Detroit a few days later. Here they found that little was known of the Universal Trade Association and Mr. Hayes.

Soon after their return Mr. Hayes was summoned to Chicago by the association, who had found in the mean time that he had been soliciting subscriptions and had met with considerable success in placing the stock of the association. Inquiries had also been coming in regarding the scheme and asking for advice about giving Mr. Hayes checks for shares. The majority of druggists approached by the promoter insisted on waiting until better evidence of success could be shown, and several hundred apothecaries are waiting to be enlightened on the subject.

Upon his return to Chicago Mr. Hayes offered to surrender to the Retail Druggists' Association all the funds he had collected together with the certificates of stock to be issued to subscriber. He also offered to send in the resignations of the National officers of the United Trade Association and allow retail druggists to be appointed in their places.

Mr. Goetz, secretary of the association, then took charge of the checks and certificates of stock. At the last regular meeting of the association a committee of ten was appointed to investigate the plan of the Universal Trade Association. This committee met Tuesday afternoon, April 8, and appointed ten delegates to attend the annual meeting of the Universal Trade Association at Detroit, April 11. It also appointed F. Von Hermann to visit the manufacturers of proprietary medicines in the East in regard to securing their co-operation. In Chicago they have been assured the hearty co-operation and support of the six leading jobbers, and should the plans upon which the local association are now working mature to the satisfaction of the committee in charge they confidently expect to have 95 per cent. of the Chicago retail druggists join them in their new fight against cutting. There are already 88 individual subscribers to the stock representing 200 shares.

Mr. Henry Goetz who has become deeply interested in the plan is somewhat enthusiastic on the subject. He insists that the transactions of Mr. Hayes which excited suspicion here and in St. Louis proceed rather from a lack of knowledge

of the proper methods of organizing, than from a desire to foist something upon the druggists which is questionable. As for his having the endorsement of the Chicago jobbers, Mr. Goetz is assured of that because Mr. Semple accompanied him.

The committee entrusted with the organization are inclined to think that the plan was not placed properly before the manufacturers, some of whom in answer to letters of inquiry from St. Louis spoke very discouragingly of Mr. Hayes and his scheme. If these manufacturers are willing to co-operate with the retail druggists and jobbers of the country in their efforts to do away with cutting it is thought that they will certainly give the plan a fair trial after it is perfected.

It has been urged by some that the manufacturers would not be willing to sink their individuality by using these labels again; that the labels could be erased or the numbers changed. These labels are to be pasted on the bottle with the number facing the glass, over this is pasted the manufacturer's label. In order to remove the U. T. A. label or make any change in it the two labels must be defaced.

To open several dozen packages for the purpose of destroying the labels would be a matter of no small expense to say nothing of the difficulty in selling the mutilated package. The committee have given this matter due consideration and they say they cannot see why the use of the label described should detract anything from the manufacturer's personality. At any rate the question as to the adoption of the plan will probably be settled in the course of ten days, in the mean time the local druggists are cutting each other's throats on proprietary articles and hoping for relief from some direction.

Mr. T. C. Ballard of Morrison, Plummer & Co has been identified with this firm nearer sixteen years than six, as reported through an error in a recent issue of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

The factory of Norton Bros., extensive manufacturers of tin boxes and cans for druggists and manufacturers of proprietary medicines, which was destroyed by fire recently, is being rebuilt in Maywood, a Chicago suburb, and they will soon be in a position to fill all orders.

The Birney Catarrhal Powder Company are fitting up a handsome office in the New York Life building on La Salle street, and will take possession about May 1. Their business has more than doubled during the last year necessitating extensive preparations for manufacturing on a large scale, which are also being made.

The Ash Soda Fountain Company, 207 South Canal street, are turning out some very handsome designs for fountains ordered early in the season and are already far behind their orders. The success of the improvements recently adopted have induced them to make preparations for greatly extending their business next year.

It is said that a number of catarrhal powders have been listed by a society that is waging war on the misuse of narcotics, and it is proposed to fight the firms manufacturing them to the bitter end. Statistics of insane asylums, sanitariums and hospitals, they claim, show an alarming increase in the use of these powders, not for catarrh but as narcotics. Investigations made show that these powders are largely composed of cocaine and by their constant use thousands of people are acquiring a habit that it is almost impossible to break.

Nathan Lapp, a druggist at the corner of Wabash avenue and Thirteenth street, recently witnessed an interesting experiment in mind reading performed in his store. A "Professor" Wilkins, who hails from one of the rural districts, came into the drug store blindfolded and accompanied by a committee who had picked out the store. The mindreader was to compound a prescription secured by the committee from a physician of its own selection. Taking the druggist's hand in his own the "Professor" began the search for pulverized capsicum. After twenty minutes' fruitless work he decided that Mr. Lapp was not able to concentrate his mind sufficiently. A drug clerk was then taken in hand and in a few minutes the "Professor" had found the right bottle. He next took from the shelf a bottle of belladonna extract, a bottle of gentian, some nux vomica and compound extract of colocynth. The combination proved to be the right ingredients according to the prescription and the test was pronounced a success.

### New York.

The agitation of the Kings County Pharmaceutical Society of the telephone matters has stirred up the telephone monopoly in a most inspiring manner. The committee composed of President A. H. Brundage and Messrs. France, Werner and Muir appeared before a joint committee at Albany two weeks since as reported exclusively in this paper at the time. The Erie County (Buffalo, N. Y.) Association were also ably represented, and the testimony given was of a most convincing kind. The telephone company were given two weeks in which to file an answer, and at the session of the committee last week the company's adherents endeavored to brow-beat and attack the character of the persons who appeared as remonstrants against the bill. In fact Frank Gardner, clerk of the board of trade, has been threatened with a suit by the committee on lamp lighting and electricity on the charge of discourtesy to the legislature. This indicates the weakness of the company. It is an open question, however, whether the bill will not be smothered in committee.

Harry Chambers, the well-known and popular New York representative of J. M. Maris & Co., recently had a call from a party who claimed to be a warm personal friend of an old customer of Harry's from the far West. He arrived at the office of the Maris Co., 20 College place, New York, in a carriage, and after introducing himself stated that he was desirous of seeing the sights of Gotham under Mr. Chambers' guidance. On being informed that Mr. Chambers was out, he announced his intention to call later. He had evidently enjoyed himself in the interval, for upon his return to the office he ordered a basket of champagne and a full course dinner; being unable to obtain these things and meeting with rather a cold reception he departed somewhat provoked, and instead of re-entering his carriage invited the driver to go inside while he mounted the box and drove off. The stranger's little exhibition of wild Western ways was funny while it lasted and provoked a good deal of merriment in the usually quiet precincts of College place.

The regular monthly meeting of the New York branch of the Interstate League at Mott Memorial Hall on Friday afternoon, April 7, was unusually well attended. The secretary announced that fourteen new names had been added to the

list of signatures on the petitions, making a total of about 400. The president read a letter from C. O. Rano, president of the State Pharmaceutical Association, on the bills affecting pharmacists which are now before the legislature. These bills were also read, and after some discussion the Saxton bill, regulating the sale of morphine, chloral, etc., and the Douglas bill, prescribing the use of fluted bottles for all poisonous liquids, were condemned. Messrs. Kress, Bender and Molwitz were appointed a committee on excise to confer with the Grocers' Union on the subject of license legislation with power to act. The president was authorized to employ a canvasser to solicit new members.

Extensive alterations are going on in the pharmacy occupied by W. G. Moffat under the Astor House. The premises were formerly owned by A. J. Ditman of Sea Salt fame. It is Mr. Moffat's intention to spend at least \$7,500 in refitting the store, - a soda fountain to measure 18 feet long has been ordered from the John Matthews Apparatus Co., and the Kinnear & Gager Co. will put in a new steel ceiling. It is expected that these alterations will result in a very attractive store.

Prof. Virgil Coblenz of the New York College of Pharmacy has been devoting his spare time during the past two years to the elaboration of notes as a basis for a work on galenical pharmacy. The demands on his time made by the work done on the pharmacopoeia last year have delayed him considerably in the work on the book, but from present indications the work will probably be ready for delivery by the opening of the next college session.

The druggists of West Hoboken are developing an unusual amount of enterprise. One prominent pharmacy on Washington street now keeps open all night and there are rumors of others who are about to follow this lead. How West Hoboken supports allnight pharmacies is a mystery.

"Jack" Rogers, the popular representative of Evans & Sons, Limited, Montreal, visited this city on his honeymoon last week, returning to Montreal on Monday last. Many of his old friends were right glad to see him to wish him every happiness.

Geo. Rosenson & Co. of 775 Columbus avenue have dissolved partnership. Is. Ullmann of the firm will continue the old business. Mr. Rosenson has bought out the People's Drug Store formerly owned by D. W. Brown of Jackson.

Thursday, April 26, is the date set for the commencement exercises of the New York College of Pharmacy. The diplomas will be awarded in the Carnegie Music Hall, 57th street and Broadway.

A. J. Ditman has been successful in the suit brought by him recently against a former partner to decide his title and rights to the exclusive control of the manufacture of Ditman's Sea Salt.

Peter Lance, the popular Eastern representative of Wm. R. Warner & Co., Philadelphia, is back in New York from an extended trip through the Eastern States.

George J. Seabury of Seabury & Johnson has left New York for Hot Springs, Arkansas, where he will spend a much needed vacation.

A pharmacy has been opened at Summit avenue and Irving street, Jersey City Heights, by Dr. Meyers.

Brent Good of Carter's Little Liver Pills fame is spending a few days in Montreal.

**Pepsin Tablets.**

No druggist need be told of the salable properties of Pepsin Tablets. They are used alike by physicians, pharmacists and the laity. To meet the demand for a low priced, first class, pepsin tablet the New York & Chicago Chemical Co., 96 Maiden Lane, New York, are now supplying a special 3 grain tablet packed in screw cap cover bottles at \$1.25 per dozen. These are most attractively gotten up and may be relied upon to possess the full digestive strength of official pepsin. If the retailer really wishes to handle a salable speciality it would be well for him to try a sample lot of the pepsin tablets which he can get from any wholesale druggist or direct from the New York & Chicago Chemical Co., 96 Maiden Lane, New York.

**Modern Business Methods.**

The growth and development which comes to a business firm as a result of employing modern methods of extending business are clearly marked in the case of C. G. Bacon & Co., wholesale druggists, 20 College Place, New York. There is pleasure in dealing with a house which considers attention to the needs of customers its first duty, and it is only in the nature of things that attentions of this kind should meet with the great increase of business which has followed their upright methods in dealing and sagacious enterprise in extending their connections. The firm has found it necessary to make considerable alterations in their business premises and C. G. Bacon & Co. have now one of the handsomest, most commodious and convenient establishments to be found among the wholesale and manufacturing drug trade of this city.

The special advertisement of C. G. Bacon & Co. which appears in this issue affords a good opportunity for druggists to open new accounts with that excellent firm. This opportunity should not be neglected. The firm of C. G. Bacon & Co. is an old established one whose standing and reputation in wholesale drug circles is of the very highest. Write to them at 20 College place, New York.

**Some Special Bargains.**

Read the special offer of the Dawes Mfg. Co. on another page in this issue if you need anything in the way of shop bottles.

Some of the special styles of bottles made by this firm are shown in the advertisement. The new round tincture free from mold marks combines the luster of the old style blown bottle with the accuracy of outline of modern mold work.

Before purchasing be sure to write to the Dawes Mfg. Co., Pittsburgh, Pa., for illustrations and descriptions of their line of shelf ware, mentioning this journal.

**Read the New Advertisements.**

This issue of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD contains seventy-two pages of reading matter and advertisements; of the latter the following are new:

The Dawes Manufacturing Company, *Druggists' Sundries and Glassware.*  
M. C. Stone, *Paper Straws.*  
C. G. Bacon & Co., *Special Offer.*  
O. & W. Thum, *Fly Paper.*  
Neidlinger Bros., *Syringes and Druggists' Sundries.*

H. K. Malford Company, *Tablet Machines.*

A. R. Elliott, *Advertising.*  
Empire Syringe Company, *Fountain Syringes.*

The Pharmacy Company, *Soap.*  
C. B. Smith & Co., *Jobbing and Manufacturing Pharmacists.*

E. L. Patch Company, *Novus Lemonade and Lithia Tablets.*

J. D. Shearer Company, *Paper and Papeteries.*

N. Y. & Chicago Chemical Company, *Pepsin Tablets.*

Thurston Chemical Company.

**Notes on Prices.****Piperazine Prices.**

W. H. Schieffelin & Co. call attention in a recent circular to the following revision in prices of Piperazine-Bayer, prepared by the Farbenfabriken vorm. Friedr. Bayer & Co., Elberfeld, Germany:

<b>Piperazine-Bayer:</b>		
In one-half ounce and one ounce vials.....	per oz.	\$4.25
In lots of twenty ounces.....	"	3.80
In lots of ten ounces.....	"	3.50
<b>Piperazine-Bayer Tablets:</b>		
In tubes of ten tablets (each tablet containing 16 gra.).....	per tube	\$1.40
In lots of thirty tubes.....	"	1.35
In lots of sixty tubes.....	"	1.25

**Wholesale Druggists' Prices.**

We note below the important changes which have taken place during the past fortnight in the prices at which retailers purchase goods in ordinary lots:

ALCOHOL is quoted \$2.36 @ \$2.50 according to quality and quantity.

CHRYSOPIANIC ACID is a little easier at 25 @ 28c.

COD LIVER OIL is stationary. Gallon lots and upward are quoted \$1.25.

ELCAMPANE ROOT is lower owing to arrivals; 12 @ 15c. represents the market.

GOLDEN SEAL owing to arrivals and an easier market is lower. We quote the range at 30c. @ 35c.

GOLD THREAD prices are revised to 35 @ 40c.

LUNAR CAUSTIC is lower in sympathy with the metal. The present price is 55 @ 60c.

MENTHOL has advanced to 40 @ 42c.

MERCURY is in less firm position and prices have receded to 60 @ 65c.

MERCURY BIODIDE is lower at 28 @ 30.

MERCURIAL OINTMENT is lower in sympathy with the other preparations of mercury, and is now quoted 52 @ 55c. for 50 per cent., and 43 @ 45c. for 1/4 mercury.

MORPHINE is stronger, and prices have advanced since our last report. Acetate is now quoted \$2.60, and the range for sulphate is \$2.35 @ \$2.60.

PIPERAZINE prices have undergone a material change. The prices are now uniform for the two leading brands, which we quote at \$4.25 for half and one ounce vials, and at \$3.50 in lots of twenty ounces. This change was noted in our issue of March 1, but through an inadvertence in reprinting an advertisement in which the previous prices were quoted there has arisen some confusion in the minds of the trade, hence the repetition of the notes this week.

PHOSPHORIC ACID is also easier and is now quoted 75 @ 80c.

PROLIGNOUS ACID is in demand and firm at 38 @ 50c.

POND LILY ROOT, yellow, is easier, and we now quote the range at 20 @ 25c.

SILVER NITRATE has declined with lunar caustic, and is now quoted 55 @ 60c.

TONKA BEANS are becoming scarce, and \$2.05 @ \$2.25 is asked.

WOOD NAPHTHA has declined to \$1 @ \$1.10.

**Review of the Wholesale Market.**

NEW YORK, April 11, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The past week has been a quiet one among the jobbing druggists and importers, the condition of the market reflecting no change from previous reports of the situation. Small lots of the several lines have continued to find a fair consuming outlet, but interior buyers yet show a hesitation to place orders for stock in excess of absolute necessities. Considering the general quietude, market values are as a rule well sustained. Opium has further declined and values may be said to be nominal. For quinine there continues a quiet market. Alcohol has been reduced by the Trust managers. The important fluctuations are noted below as follows:

**ADVANCED.**

Cacao butter.  
Dragon's blood.  
Nitrate of soda.  
Oil of peppermint.  
Shellac.  
Snake root.

**DECLINED.**

Alcohol.  
Bichromate of potash.  
Cube berries.  
Ergot.  
Oil of wintergreen.  
Opium.  
Quinine.

**DRUGS.**

ALCOHOL has been lowered by the Trust managers to \$2.18 @ \$2.22, which brings the price down to the limit of outside competition. The net price of Trust produce after deducting rebate is about \$2.05 for lots of 10 barrels.

BALSAM COPAIBA is improving in position and the tone of the market is stronger. Recent arrivals of Para are offered at about 34c. We quote the range at 33 @ 40c.

BALSAM FIR, Canada, is quiet but as the stock is well controlled by jobbers there is no urgency to realize; supplies now offer at \$3.50 @ \$3.70.

BALSAM TOLU meets with little inquiry though there is no quotable change in value. We quote the range of prices at 24 @ 27c. as to quantity, quality and seller.

BARK, Cascara Sagrada, is somewhat scarce and 6c. is generally asked.

BALSAM PERU is scarce and firm and prices are maintained with a fair show of firmness at the quoted range, \$1.65 @ \$1.70.

BUCHU LEAVES, short, continue in fair jobbing inquiry with a preference extended for the better grades.

CANTHARIDES, Chinese, are offering freely at a decline on the previous range, 25 @ 26c. being generally asked, though some of the trade refuse to shade 30c.

CACAO BUTTER continues to reflect a quiet market and prices are less firmly maintained. Jobbing sales at 32 @ 32 1/2c.

COD LIVER OIL, Norwegian, is meeting with a fair amount of attention from the trade and prices are steadier upon the basis of \$28 @ \$29 for limited quantity.

CHONDRUS (Irish Moss), has shown some action during the week. We note sales of some one thousand lbs. bleached at 11 1/2c.

DRAGON'S BLOOD, in reeds, has advanced owing to scarcity. The small available supply is closely concentrated and held at 75c.

ERGOT, notwithstanding the reported strong statistical position at primary sources, is weak and neglected in this



market. Purchases of German can be made at 23c. and Spanish 27c.

GLYCERIN is dull and unsettled with prices nominal in consequence of active outside competition. Drums are nominally quoted 12c. and bbls. 12½c.

JUNIPER BERRIES have been in active request and we note sales of some 40 bags at 2¼ @ 2½c.

LYCOPodium is well maintained at 52 @ 56c., but no sales of consequence have transpired in the interval.

MENTHOL, owing to recent arrivals, is easier in price, but concessions do not appear to stimulate important action. We quote Japanese \$4.50 @ \$4.75.

OPium offers with freedom, but the tone of the market is weak, and no interest either of a speculative or legitimate character is extended. The uncertainty regarding tariff changes causes a feeling of hesitancy among buyers, so that there is a lack of confidence in the situation. Cases are quoted \$2.50, and to arrive quantities obtainable at \$2.50. Jobbing quantities may be obtained at \$2.52½ @ \$2.55; powdered is in small supply and maintained at \$3.45 @ \$3.50.

QUININE has sold down to 22½c. since our last report, but an advance on this figure is now firm owing to withdrawal of the goods offered at the low range quoted. Foreign from outside hands is quoted 23½c. @ 24c., though bids of 23c. cash would probably be obtained if submitted to some holders.

SENNA, Tinnevely, is in good demand and numerous sales are reported. Strong advices from primary sources have brought about a firmer feeling, though prices are nominally unchanged at the quoted range.

TONKA BEANS are in limited supply and prices are firmly maintained at the previous range.

VANILLA BEANS continue in good jobbing request with numerous sales within the range of \$6.50 @ \$13.00 as to quality.

#### DYES.

CUTCH has continued quiet with prices steady. Prime quality bales held at 5½c. @ 6c.

DIVI DIVI remains quiet at the nominal range, \$55 @ \$56.

GAMBIER is without important change. Steamer lots at the wharf are quoted 4 @ 4½c., while sail stock from store is maintained at the previous range of 4½c. @ 4¾c.

NUTGALLS, Blue Aleppo, are in moderate request with the current sales at the range of 13½ @ 14½c.

SUMAC is passing out in small quantities into channels of consumption at the range of \$72.50 @ \$77.50 for Sicily and \$43 @ \$47 for Virginia

#### CHEMICALS.

ACETATE OF LIME has met with a fair inquiry and we are reported numerous sales of gray at \$1.50, though the nominal range is \$1.55 @ \$1.60. Brown is steady at 90 @ 95c.

ARSENIC, white, continues very scarce and the market is firm at 3½ @ 4c.

BLEACHING POWDER remains quiet at nominally unchanged prices. German, spot, held at 2½c. and English 2¼ @ 2½c. as to quantity.

BLUE VITRIOL does not change from 3½ @ 3¾c. as to make and quality and numerous sales are reported at this range.

BRIMSTONE reflects a quiet and easy market; for best seconds \$17.25 @ \$17.50 is quoted.

CAUSTIC SODA has been in demand, and the distribution for the week has been of the usual volume. We quote the range at \$2.50 @ \$2.65 as to test.

CHLORATE OF POTASH offers more freely

and at slightly easier prices. Sales of German crystals are reported at 13½c., English at 14¼ @ 14½c. Powdered is generally held at 14½ @ 14¾c.

CREAM TARTAR continues to offer at 17½c. for powdered, at which figure a moderate sale is reported.

NITRATE OF SODA is offered sparingly, and prices are maintained with a considerable show of firmness. Holders are asking \$2.20 @ \$2.25 for spot goods, and for forward delivery \$2.17½ @ \$2.22½ is quoted.

QUICKSILVER continues in steady moderate demand, with the current sales at 45½ @ 47c.

OXALIC ACID is dull, with offers of stock at 6½ @ 6¾c.

#### ESSENTIAL OILS.

ANISE is yet held at \$1.45, though the trade requirements are very moderate at the moment.

CASSIA remains quiet, but there is no variation in prices. We quote the range at 85 and 90c.

CUBEB is selling in about the usual quantity to consumers, with the range quoted \$1.50 @ \$1.70.

LEMONGRASS is selling quite freely in a small way at \$1.30 @ \$1.65 as to brand.

PEPPERMINT, HGH, is offered in some instances at \$2.80 @ \$2.85; the principal holder refuses to entertain orders at \$3 bulk. Western and Wayne County are firm at \$2.30 @ \$2.50 respectively, with an occasional advance demanded on these figures.

SASSAFRAS does not develop any action of consequence, and prices are firm at the previous range.

WINTERGREEN is yet held at \$1.40 @ \$1.50 for natural and 80 @ 87½c. for artificial.

#### GUMS.

ALOE, Curacao, is finding moderate sale with 2¼ @ 3c. representing the range.

ASAFOETIDA is in better supply and offering freely at 15 @ 30c. as to quality. The outside limit is regular for strictly fancy goods.

CAMPOR continues dull at 42 @ 43c. for domestic and 45c. for Japanese.

CHICLE is quoted at 24 @ 28c. as to holder, though some in the trade are willing to shade this price on a firm bid for quantities.

SENEGAL: sorts are finding a moderate sale at the range of 9 @ 9½c.

SHELLAC has continued firm and the present position of the article is regarded as favorable for an improvement in values. Prices are steady at the quoted range.

TRAGACANTH is maintained steadily at the range of 32 @ 56 cents for Aleppo as to quality and a fair distributive trade is reported.

#### ROOTS.

The movement in roots continues of a light and unimportant character with few features of interest to report.

ACONITE is firmly held at 11½ @ 12 cents for German with small sales at these figures.

DANDELION is steady and in moderate request at 7½ @ 8 cents.

GALANGAL continues held at 3½ @ 4c. with small sales at this range.

IPKAC continues dull, but the market is sustained at the previous range of \$1.27½ @ \$1.40.

JALAP is in liberal supply and selling from jobbers' hands at 22 @ 23c.

SARSAPARILLA, Mexican, is jobbing fairly at 9 @ 9½c.

SENEGA continues held at 38½ @ 40c. The demand for purposes of export is good, but holders' limits exceed those of

shippers, and the number of stock changes are limited in consequence.

SNAKE, Texas, is in small supply and firm at 35 @ 36c.

#### SEEDS.

CANARY, Smyrna, is quoted 2½c., though business is mainly of a jobbing character.

CARAWAY, Dutch, offers at 6½c., though important demand is absent.

CELERY is quiet but firm at 18 @ 19c.; jobbing sales.

MUSTARD is very firmly held in view of the continued favorable reports from the coast. For yellow California 4c. is generally asked, and brown 3½c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS WANTED.

WANTED.—Situation by registered pharmacist in Connecticut; 9½ years' experience; best references. Address "Quinine," 709 South Main street, Waterbury, Conn.—14.

ANY DRUGGIST in need of a thoroughly competent and sober clerk, a graduate P. C. P., unmarried; long experience in city and country, please address "Senna," care this office.—14.

DRUG CLERK, age 25, American, six years' experience, desires permanent position; reference, present employers. Address "Drugs," Box 424, Haverstraw, N. Y.—14.

WANTED.—Advertising matter of any kind; circulars, papers, bills, almanacs, samples of merchandise to distribute from house to house, tack up signs, lettering fences, buildings, bridges, rocks, etc.; do any advertising you want in Mercer County; specialty made of Shenango and Mahoning valleys, the very beehive of industry; we make affidavit of work performed; give bond and references, when required, send samples explaining nature of work required; how much you have, for price and terms. Distributing and Mailing Agency, Sharon, Mercer Co., Pa.

POSITION WANTED.—One year's experience; age 18; speak German; strictly temperate; willing to work; satisfactory references. Address H. G. Cordes, 14 Second street, Troy, N. Y.

POSITION WANTED by senior clerk of N. Y. C. P. (22 years) with 4 years' experience, both city and country; can furnish very best of references. Address "Willing," care of this office.—15.

JUNIOR (24), with 8 years' experience, speaking English and German, desires position in or out of New York State; good references. Address "Kino," care of P. P. E. C., 41 W. 24th str. et. New York.

WANTED SITUATION by a competent druggist in either wholesale or retail; large experience in both; good references. Address R. S. (Canadian diploma), Verdon, Mass.

POSITION WANTED by a Ph.G.; 64 years' experience in good stores; licensed in New York State; best of reference and no bad habits. Address "Panax," care this office.

#### BUSINESS OPPORTUNITIES.

WHY NOT OWN RESPECTABLE and lucrative business in a large city and employ salesmen for surrounding towns; we will give exclusive territory for a quick selling business specialty to men of ability and small capital; the goods are necessary, and the periodical supplies yield permanent and profitable returns. Address "Profitable," care this office.—14.

FOR SALE.—Nice drug business; fine location; established 5 years; will take fair price cash; No. of store 380 State street, Bridgeport, Conn.

DRUG BUSINESS for sale at a bargain; proprietor has other business and will sell at sacrifice. Address S. W. Ferguson, Cooperstown, N. Y.—16.

AN EXCEPTIONALLY GOOD CHANCE for you to get a chemical education free; must have \$1,000. For particulars address C. O. Myers, Centralia, Kan.

FOR SALE OR EXCHANGE.—Good paying drug store; expenses light. Address W. E. R., Windsor, N. Y.

**Connecticut Notes.**

George Valleau of Bridgeport, formerly of New York, has accepted a position in Booth's pharmacy on Main street, Bridgeport.

J. M. Whitney, class of '91, Michigan School of Pharmacy, has taken a position with H. Fisher & Sons at the Broad street store in Bridgeport.

Joseph V. Brennan, for many years city apothecary of Bridgeport, has been appointed assistant superintendent of the poor in the city named.

The engagement is announced of Miss Olive Wiggins of Bridgeport, Ct., to Harry W. Hyatt formerly of New York, but now of Bridgeport. Mr. Hyatt holds a position in Fisher's Park Avenue pharmacy.

**Michigan Mention.**

C. W. Ward is the successor of Ward & Wolfe, Detroit.

Detroit retail druggists will hold a banquet in the near future.

Waldron & Todd, at Jackson, will soon occupy new quarters in the Hurd House.

Gadding & Wilcox have succeeded the firm of W. E. Wilcox & Co. at Onondaga, Mich.

C. de Pree, formerly a drug clerk at Kalamazoo, has opened a drug store at Holland.

Tibbs' drug, store at Grand Rapids, has been moved from 153 Monroe street to 618 S. Division.

George L. Rush, a Bay City druggist, was last week elected recorder of the city on the Republican ticket.

Fire destroyed the business section of Shaftsbury last week. The store and drug stock of G. A. Kay was burned.

Edward Blum, druggist at Detroit, has been appointed to a lucrative position in the United States appraiser's office.

Nelson Baker & Co., Detroit, are building a two-story addition to their laboratory which will be used as a pill department.

W. A. Rudell and S. Zellar have purchased an interest in the drug store of V. R. Conway, at Sault de Ste. Marie. The firm will hereafter be known as Conway & Co.

Frederick Stearns has petitioned the probate court at Detroit to be appointed administrator of the estate of Chicanori Tomohira, the young Japanese chemist who committed suicide.

W. H. Allen, formerly in charge of the chemical laboratory, department of pharmacy, Detroit College of Medicine, has been placed in charge of the new laboratory of Farrand, Williams & Clark.

J. D. White of White & White, druggists at Grand Rapids, committed suicide last week by shooting himself and cutting his throat. He left a letter saying that domestic troubles were the cause.

The Michigan Chemical Company was formed last week, and will engage in a general chemical brokerage business for this State and the West. The firm consists of John D. Vhay, William J. Vhay, and Edwin C. Eccleston. J. D. Vhay will act as manager.

A Detroit druggist has the following card in his window:

"We are right in it! Come in and wait

for the car. Free use of telephone. Postal cards and stamps at cost. Cut rates on all drugs, what more can man want?"

**Western.**

It is rumored that Atkinson, Mo., is to have a soap factory.

E. O. Howard & Co. of Neola, Iowa, have dissolved partnership.

The firm of D. D. Harr & Co. of Klemme, Iowa, has been dissolved.

Hellickson & Collins have bought out the firm of Blehrud & Griezinger at Caledonia, Minn.

F. C. Hamen & Co. have succeeded to the business of L. D. Newton of Superior, Wisconsin.

A. G. Spohr of Mason City, Iowa, has taken in a partner, and the firm name is now Stewart & Spohr.

The firm of Robinson & Brooke is announced as succeeding Robinson & Stevens at Clear Lake, Iowa.

The safe of Brown's drug store, St. Louis, Mo., was recently blown open by burglars and \$40 taken.

J. L. Cramer, for several years manager of a large drug store in Terre Haute, Indiana, has purchased the B. G. Ridgway stock of goods at Cedarville, O., and intends running a first-class drug store.

Three druggists in the vicinity of Fort Sheridan, Ill., have been arrested under indictment for selling liquor without a license. It is hard on drug men to be thus interrupted in their magnanimous and philanthropic efforts to assuage the thirst of the suffering unfortunates on the government reservation.

**Random Notes.**

Chamber Bros. of Seward have moved their drug store to Germantown.

A. D. Henline has bought the drug business of A. J. Shephard at Kearney.

J. J. Frater bought a drug stock at Blair and removed it to David City.

R. J. Joiner has succeeded to the business of R. W. Jones at La Crosse, Fla.

T. C. Kunkel has purchased a new drug stock and opened up at Weeping Water.

D. H. Kellogg & Son of Oakland, Cal., are reported to have given a bill of sale for the store.

Dr. W. H. Wilson, a Table Rock, Cal., druggist, was severely injured by being thrown from his buggy.

Paul Lehrack is back on duty again in Heilman's drug store at Tecumseh, Neb. He has been out with a broken leg.

With a capital stock of \$25,000 the Minneapolis Furnace Company of Minneapolis filed articles of incorporation.

The harvesting of the slippery elm crop is now proceeding rapidly, and promises to equal, if not excel, those of former years.

F. H. Hainert is president of the Hainert Drug Company of Minneapolis, incorporated recently with a capital stock of \$20,000.

C. B. Fuqua of the City drug store, Big Rapids, Mich., has sold his stock to Geo. W. Wilner, who will consolidate the same with his own.

E. Beach, manager of Dr. Morris's drug store at McCool Junction, Neb., recently died of lung fever. The remains were taken to Valparaiso for interment.

J. D. White, aged 65, father of W. L. White, a well-known druggist and military man of Grand Rapids, committed suicide to-day by cutting his throat. Domestic trouble induced despondency and led to the deed.

C. W. Hull, a Center avenue druggist, Bay City, Mich., who gave a chattel mortgage on his stock to Williams, Davis, Brooks & Company, a few days ago, has retired from the business. He is succeeded by Huyck & Ritchie.

Geo. Griffith, a young man of Des Moines, Ia., after quitting the service of John Sandholm, a druggist of Kirkwood and failing to secure employment, took thirty-five grains of morphine and sank peacefully into repose.

John B. Bond, Jr., a son of the widely-known and respected Dr. John B. Bond, of Little Rock, Ark., has purchased the Haliburton drug store in Little Rock and will conduct it as a first-class pharmacy under the firm name of John B. Bond, Jr., & Co.

Frank H. Lalor, druggist, 10 Warren street, Trenton, N. J., has been nominated for postmaster of Trenton by President Cleveland. This is a compromise after a long and bitter fight for the place in which the United States Senators from New Jersey took part. Confirmation will no doubt follow promptly.

Frank Bonheim, Atkinson, Kan., the druggist, who rooms at his store, was taken ill at 4 o'clock this morning, and took an overdose of a poisonous drug in his desire to secure immediate relief. The effects of the medicine soon became apparent and Bonheim did some walking that would have been creditable to a professional pedestrian. The effects were soon overcome.

**Boards and Societies.**

**NEW JERSEY BOARD OF PHARMACY.**—A regular meeting for the examination of applicants for registration will be held in Franklin Hall, cor. Warren and Montgomery streets, Jersey City, on Friday, April 20. Particulars can be had by addressing the secretary, Albert S. Elwell, Bridgeton, N. J.

**FLORIDA STATE BOARD OF PHARMACY.**—The Florida State Board of Pharmacy will convene in Tampa on May 16 for the examination of persons desirous to be registered. For further information write to Secretary Ed. Delouest, Ocala, Florida.

**KINGS COUNTY PHARMACEUTICAL SOCIETY.**—The next regular meeting of this society will take place in its meeting room at 399 Classon Avenue on Tuesday, April 10, 1894, at 2.30 P.M. A paper will be presented on "The Choice of Excipients for Special Substances," by J. F. Golding. "The Telephone Matter"—what has been and may be done on it will be told by Messrs. Werner, Muir and France. An automatic telephone in full operation will be exhibited and explained. A paper will be presented on "How Adulterations in Drugs may be Discovered by the Microscope." Illustrated by specimens, under 15 microscopes, by J. H. Hunt, B.S., M.D., assisted by Drs. Jelliffe, Golding and Mangan, Messrs. Schimpf, Anderson and Lohness. It is the aim to make the society helpful to every pharmacist, a medium for exchange of ideas and experiences, and for thoughtful consideration of proper methods of co-operation.

## Trade Notes.

A free sample of fine linen writing paper and envelopes can be secured by any reader of this paper who will put his name on a postal card and send it to J. D. Shearer Co., Pittsfield, Mass., who are the original manufacturers of Linens, Ivorines, Irish Bond, English Parchment and many other well known descriptions of fancy stationery.

The E. L. Patch Co.'s line of 10 cent novelties which comprise "Novus Root Beer Tablets," "Novus Lemonade Tablets," "Novus Headache Tablets," "Novus Headache Powders," and "Compound Coltsfoot Cough Tablets," or "*Stop that hack*," represents one of the most profitable little side lines it is possible for a druggist to sell. They are neat and cleanly to handle, and need only be placed on show to sell. If you are not already familiar with the E. L. Patch Co.'s preparations send for a catalogue to 91 Broad street, Boston, Mass.

The H. K. Mulford Co., manufacturers of compressed tablets, triturates, lozenges, etc., who are the patentees of the Crown Tablet Machine, have an announcement in this issue in which a cut is shown of the improved "Crown" as used by manufacturers. The H. K. Mulford Co. make tablet machines adapted to every size of tablet and requirement of the druggist. Those of our readers who are contemplating the addition of a tablet apparatus to their outfit will do well to write to H. K. Mulford Co. for prices and particulars, which they will very gladly send to any one mentioning this journal.

### Premature Exposition Diplomas.

The attention of our readers is directed to the full-page advertisement of Seabury & Johnson, which appears on page 13 of this issue. The new advertisement is interesting from the fact that Seabury & Johnson have deemed it necessary to publish an official notification from the chairman of the Executive Committee on Awards of the World's Columbian Exposition regarding the issuance of alleged facsimiles of the engraved diplomas.

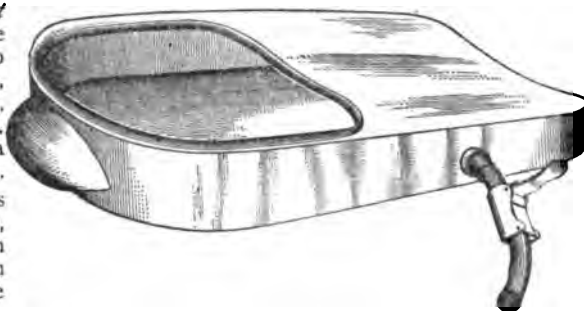
The Seabury gauzes are now sent out in patented containers with a view to preserving the antiseptic strength of the gauze. These containers were esteemed so highly by the judges of the World's Columbian Exposition as to receive a special reward.

Seabury's gauzes, like all goods of acknowledged merit, are widely imitated and it is necessary for druggists when ordering these goods to distinctly specify Seabury & Johnson's, and thus avoid substitutes. Samples of the different containers for distribution among physicians will be supplied to any readers of this paper. Those druggists who wish their names and addresses stamped on the boxes should state so when writing.

The Empire Syringe Co., 110 Fulton St., New York, advertise a three pipe Fountain Syringe which they claim to be the best article in the market. The price for gross lots of this syringe are remarkably low, especially as they offer to put up the goods under any brand desired. To prove that the article is worthy of being sold under the druggist's own brand the Empire Syringe Co. offer to send samples on request. Why not write for one?

### Irrigation Bed Pan.

A. R. Gulick, 88 Herkimer street, Brooklyn, N. Y., is introducing the "Irrigation Bed Pan" as illustrated herewith. It is stated to be the invention of a prominent New York physician who recognized the need for some device of its kind in carrying out the details of antiseptic surgery. The pan is made of porcelain and has the following dimensions: Length, 15 inches; width, 19 inches; depth, 8 inches at back part, and at longitudinal center it gradually slopes down from 1½ inches to ¼ of an inch in the front part. The cover on the front part of pan is concave in cross section. There is a cylindrical extension or outlet on either side of



pan, as shown in figure, to which is attached a rubber tube, 3 feet in length, ½ inch in diameter, and provided with a patent shutoff. This tubing allows the free passage of all fluid discharges to a suitable reservoir on the floor, and when used as an ordinary or antiseptic vaginal douche an unlimited quantity of liquid can be used at one irrigation (capacity 3 quarts), so it is claimed there is no danger of soiling the bedding or clothing. The point is made that by removing the drainage tube and putting ordinary corks in the outlets it can be used as an ordinary bed pan. The price of the pan is placed at \$3.50, and samples can be had at the above address.

### A New Pocket Stove.

A small heater, called a "pocket stove," but designed to meet a variety of needs, has been invented by J. T. Ellis, of Newark, N. J. Within a neat, perforated nickel-plated box, one-fourth larger than our diagram, is a combustion chamber, surrounded with fine wire gauze, so as to admit air without releasing any ashes. From the center of this inner receptacle there rises a pin, on which, when the stove is to be used, one impales a piece of specially prepared fuel. This is a tiny round cake, composed of doubly calcined charcoal and other materials, the cohesiveness of which is aided by a few interwoven wires. It is nearly twice as large as an ordinary checker. You light this with a match; the removable cover of



the stove is now replaced and fastened with a rotary motion of the hand, and in two or three minutes the metal becomes so warm that you cannot hold it comfortably in contact with the bare skin, although it is not hot enough to scorch the most delicate

fabric. For convenience in handling the maker provides an adjustable open-work rim that fits snugly around the outer face of the article. One cake, costing a cent or less, lasts about two hours and burns without smoke, flame or smell.

### Chevalier of the Legion of Honor.

By commercial cable under date of April 8 we learn that the famous house of Ed. Pinaud of Paris has again been honored; and this time it is no less a distinction than the bestowing by the French Government on Victor Klotz, the head of the house of Ed. Pinaud, the title of Chevalier de la Legion D'Honneur.

This great mark of governmental favor was conferred on Mr. Klotz for the grand exhibit at the Chicago Exposition, and for the superiority of the goods.

We extend to Mr. Klotz our hearty congratulations, as the honor is not an empty one, for the recipient of the Order of the Legion D'Honneur from the French Republic must have rendered great services in advancing either its manufacture or arts, or for some other meritorious achievements.

We have no doubt that the great house of Ed. Pinaud will now become more famous and more widely known than ever.

### The Ice Crop.

It is generally conceded that the ice crop of the past winter is considerably below the average in amount as well as in quality, and that prices the coming summer will be higher than last year. This will not be because there will not be ice enough in the country for all needs, but on account of the uneven distribution of supplies which will necessitate importations from distant places as the season advances. The mere cost of cultivating and storing ice does not average over twenty cents per ton where the facilities for harvesting cheaply are available. What makes ice expensive to the consumer is the cost of transportation by water and rail, especially the latter; the waste in transit from the place of production and the additional shrinkage in local storehouses and in the process of delivery in wagons.

These conditions constitute serious obstacles to low-priced ice, and they will be encountered this season over a wide area of country. From the best sources of information accessible it appears that in all the States south of the Pennsylvania line the ice crop has been a complete failure, while in those in the latitude of Pennsylvania, including Ohio, Indiana, Kansas, Iowa and Illinois, and north to Michigan and Wisconsin, the crop is considerably short and of inferior quality, as, indeed, it is also in Connecticut and Rhode Island. The deficiency in these sections, which it is well known constitute the most densely-populated portion of the country, will have to be brought by rail or water from the colder climates of the northeast and northwest; so that the main question for consumers the coming summer will be one of price.

Fortunately, ice factories have increased rapidly in all the States where the natural ice crop is uncertain, and these sources of supply will do much to keep down prices, unless, indeed, the two rival branches in the trade should combine against the interests of consumers, which is the danger to be feared. Taking a general survey of

# American Druggist and Pharmaceutical Record.

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A. R. ELLIOTT, President.

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Half "	27 00	138 00	240 00	432 00	702 00
One "	45 00	230 00	413 50	720 00	1170 00

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

## Medical Education in Indiana.

In that fair land of freedom Indiana, where there are no legal restrictions on the practice of medicine and pharmacy, they have some queer schools. Below is a reply from one Josiah Adams, M. D., of the Curtis Physio-Medical College, Indianapolis, Indiana, written in answer to a decoy letter sent him by the editor of the Fort Wayne Medical Magazine:

inclose stamps for for Reply  
269 1/2 MaSatutis A vi ie W  
Indianapolis ind

feb 18th 189

mr M A maS:n Dear Sir your letter of feb 14th At hand in Reply, Will Say that Wea Can not tell Whether Wea Can Gradreate you on Woone term or not it Will all Depind on hoW fur you Ar AdvanSed in metiCal branches Wea Will Assist you All in our Power And Gradreate you Just AS Soone AS you Can become qualified the time chat it Will take for you to beacome qualified Depinds Apon hoW fur you Ar noW Advanced in the Study of medCin Wea Ar All Ways Willing to Gradreate Students JuSt AS Soone AS it Can bea Done bring your Sirtificate And RecommendationS And Come At WonSe Wea Will Arrange With you on the veray beSt And moust Libereil termS if you can bring other Students With you Doo So hoW Long have you bin Studing medCin boW miny termS have youe Atinded Wea

Gradreate no body till they Ar qualified but hould no Woone Atter they Ar qualified your Leter WaS Remailed to mea from fort ReCovery And CaSed Some Delay.  
ProfeSer J F AdamS M D

## ON ORGANIZATION.

IT is pleasing to note an awakening of spirit among the retail pharmacists of this city and State with regard to organization for the regulation of prices and against the enactment of harmful measures in the State legislature. The local branch of the Interstate Retail Druggists' League is making itself especially useful and their action in sending protests to the committee on legislation of the State association must be assuring to every one who has the best interests of the profession at heart. The fact that the College of Pharmacy of the city of New York has announced its intention to look more closely after the affairs of the retailers in future should also prove welcome news. Composed as it is of the best and most eminent pharmacists of the city, the college should wield an influence of great weight in all matters affecting either the professional or the trade interests of pharmacists.

Complaint has been made in the past that the legislative committee of the State Pharmaceutical Association has been too inaccessible to the rank and file of pharmacists to be of any real utility as a check on action affecting pharmacy in the State legislature; and the committee has in consequence been considered of little value as a reporter of pharmaceutical legislation. Good reasons existed and exist still for complaints of this kind. Measures immediately affecting the interests of the pharmacists of the metropolis have been allowed to pass into law without protest or warning from their country brethren; and the State Pharmaceutical Association instead of appealing to the pharmaceutical press when measures adverse to pharmacists have been introduced, have preserved a silence which can only bear one kind of interpretation.

In the past, organization has been of immense advantage to pharmacists, as by this means many notable privileges have been secured from the legislature. The privilege of exemption from jury duty is a noteworthy example of what may be obtained by concerted action. The movement looking to this had its origin with the retail pharmacists of New York, who organized themselves into a solid body

and insisted with all the strength that comes from organization upon the granting of the privilege demanded.

If the New York City branch of the Interstate League can prove its usefulness to the pharmacists of the State by procuring the enactment of suitable pharmaceutical legislation and exercising some supervision over the course of legislation as it affects drug interests, it will surely advance itself in the estimation of the entire profession and place the pharmacists of this State in a position of unity and strength.

FOR several weeks past the newspapers of the country have been filled with distressing accounts of conflicts between the citizens of South Carolina and the constituted authorities of that State. The enforcement of an obnoxious law, the Dispensary Liquor Law, has been the prime cause of the trouble. In this journal for December 28, 1893, we published an account of the workings of the law in its application to the pharmacists of the State, and this account will doubtless be read with renewed interest just now in view of the recent developments. Pharmacists, we are glad to note, have not thus far figured as actors in the deplorable occurrences; and it is not likely that we shall hear of any in the profession playing the role of anarchists by making armed resistance to the law. They prefer to submit quietly to the provisions of the Dispensary Liquor Law until its constitutionality has been decided in the courts.

THIS week we publish the second installment of names of those who have made an average of seventy-five per cent. or over in answering the questions propounded in our Quiz Box. While confident that such a department would be of value, we scarcely anticipated that the interest excited by it would be so widespread as it is shown to be by the answers received. It is not alone the apprentices and the students who are taking an interest in the Quiz Box, many proprietors of stores are brushing up their memories by entering the competition. Much work is involved in carefully examining and grading these papers, but we cheerfully undertake it in the cause of pharmaceutical education.

## SACHET POWDERS.

By A PRACTICAL PHARMACIST.

In the preparation of sachet powders the dry materials should be so ground as to be of a uniform fineness, about No. 40 sieve, and be thoroughly commingled. Where oils or mixed perfumes are added it is well to mix the oils with some deodorized alcohol and sprinkle upon the powders and then thoroughly mix between the hands, after which the powder may be left open long enough for the alcohol to evaporate.

## CLOVE PINK.

Orris root.....	12	ounces
Lavender flowers.....	6	ounces
Patchouli leaves.....	3	ounces
Cloves.....	10 1/2	ounces
Tonka beans.....	1 1/2	ounces
Musk.....	12	grains
Pimento.....	1/2	ounce
Otto rose.....	60	drops
Oil neroli.....	60	drops
Oil sandal.....	120	drops
Oil lavender (English).....	60	drops

## ESS. BOUQUET.

Orris root, sandal, rose flowers, orange peel, each.....	4	ounces
Musk.....	2	grains
Cumarin.....	4	grains
Vanilla.....	4	grains
Oil rose.....	12	drops
Oil bergamot.....	12	drops
Oil neroli.....	5	drops
Oil ylang ylang.....	5	drops
Oil geranium.....	4	drops
Oil cassia.....	5	drops
Oil bitter almond.....	3	drops
Extract jasmin.....	1	ounce

## FRANGIPANNI.

Orris root.....	4	ounces
Rose flowers.....	4	ounces
Wild thyme.....	1 1/2	ounces
Sassafras oil.....	1/2	ounce
Orange peel.....	8	ounces
Musk.....	1	grain
Civet.....	1	grain
Cumarin.....	2	grains
Oil rose.....	6	drops
Oil sandal.....	5	drops
Oil rose geranium.....	5	drops
Oil bitter almonds.....	2	drops
Essence jasmin.....	1	ounce

## HELIOTROPE.

Orris root.....	200	parts
Rose flowers.....	150	parts
Tonka beans.....	100	parts
Vanilla.....	30	parts
Musk.....	1	part
Oil bitter almonds.....	6	drops

Dissolved in

Alcohol.....	10	parts
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And poured upon

Powdered orris root.....	20	parts
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Then mixed with the other ingredients.

## LAVENDER.

Lavender flowers.....	80	parts
Benzoin.....	20	parts
Oil bergamot.....	1	part
Oil lavender (English).....	2	parts

## MARECHALE.

Sandalwood.....	300	parts
Orris root.....	250	parts
Rose leaf.....	200	parts
Clove.....	150	parts
Cassia.....	150	parts
Musk.....	1/2	part

## MILLEFLEUR.

Lavender flowers.....	15	parts
Orris root.....	15	parts
Rose flowers.....	15	parts
Benzoin.....	15	parts
Tonka bean.....	15	parts
Vanilla.....	3	parts
Santal.....	5	parts
Clove.....	10	parts
Cardamom.....	5	parts
Cassia.....	5	parts
Musk.....	1	part

## ORIENTAL PERFUME.

Sandal.....	2	ounces
Rhodium (wood).....	2	ounces
Cloves.....	1	ounce
Cassia.....	1	ounce
Orris.....	4	ounces
Calamus.....	4	ounces

Benzoin.....	1	ounce
Myrrh.....	1	ounce
Orange peel.....	4	ounces
Rose leaves.....	4	ounces
Ambrette seed.....	2	ounces
Essence ambergris.....	1/4	ounce

## PORTUGAL.

Orange peel.....	40	parts
Coriander.....	10	parts
Cloves.....	5	parts
Storax.....	10	parts
Benzoin.....	5	parts
Ambergris.....	1/2	part
Musk.....	1	part
Oil cassia.....	25	drops
Oil patchouli.....	5	drops
Gil rose geranium.....	2	parts

## ROSE.

Rose flowers.....	250	parts
Oil rose geranium.....	1	part
Oil rose.....	1	part
Essence ambergris.....	10	drops
Essence musk.....	10	drops

## VERVAIN.

Lemon peel.....	16	ounces
Lemon thyme.....	4	ounces
Oil lemon grass.....	60	drops
Oil lemon.....	1/2	ounce
Oil bergamot.....	1/2	ounce

## YLANG-YLANG.

Orris root.....	12	ounces
Rose flowers.....	12	ounces
Orange peel.....	16	ounces
Cumarin.....	2	grains
Vanillin.....	4	grains
Civet.....	1	grain
Musk.....	1	grain
Oil ylang-ylang.....	30	drops
Oil rose.....	30	drops
Oil bergamot.....	10	drops
Essence jasmin.....	1	ounce

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Stick Cosmetic.** T. R.—An improved formula for this article reads as follows:

Wax.....	9	parts
Olive oil.....	3	parts
Soap.....	10	parts
Acacia.....	9	parts
Glycerin.....	2	parts
Rose water.....	120	parts

Perfume to suit.

Mix according to art.

**Angostura Bitters.**—From A. Gates, Toledo, O., we are in receipt of the following formula, which he states he has used with satisfaction for fifteen years:

Calisaya.....	20	oz.
Cusparia.....	40	oz.
Gentian.....	4	oz.
Snake root, Canada.....	5	oz.
Snake root, Virginia.....	5	oz.
Glycyrrhiza.....	10	oz.
Taraxacum.....	10	oz.
Pimenta.....	10	oz.
Cardamom.....	6	oz.
Orange pulp.....	4	oz.
Balsam tolu.....	4	oz.
Rhubarb.....	2	oz.
Galangal.....	2	oz.
Alkanet.....	16	oz.
Orange peel.....	16	oz.
Nutmeg.....	2	oz.
Coriander.....	2	oz.
Catechu.....	8	oz.
Mace.....	1	oz.
Red Saunders.....	20	oz.
Turmeric (prepared).....	8	oz.
Alcohol.....	30	gallons
Water.....	20	gallons
Honey (fresh).....	50	pounds

Mix the alcohol and water. Grind the drugs, mix intimately and macerate with the mixture of alcohol and water during

four days near a warm place; filter and add the honey. The turmeric should be first freed from oil and resin by washing with highly deodorized benzine, and afterward allowed to dry in the air.

**Richier's Pain Expeller.** P. J.—A correspondent of the *Pharmaceutische Zeitung* supplies a formula which will make a good preparation, such as the Pain Expeller:

Capsicum.....	2.0
Camphor.....	25.0
Water of ammonia, 10 per cent.....	50.0
Oil rosemary.....	10.0
Oil thyme.....	5.0
Alcohol.....	enough

The capsicum is extracted in a percolator with alcohol sufficient to make 10 per cent. of percolate. The camphor and oils are dissolved in this and the ammonia added.

**Calomel and Tinct. Iodine.**—H. L. C. writes: "In the article on 'Calomel and Tincture of Iodine' printed in your issue of March 22 the author speaks of a reaction between the potassium iodide of the tincture and the calomel. Was compound tincture of iodine not intended here?"

The author had reference to the tincture of iodine of the British Pharmacopoeia. Each imperial pint of which contains 1/2 ounce av. of potassium iodide.

**Heiskell's Ointment.** J. E. A.—This ointment is said to resemble closely the official cerate of subacetate of lead.

**Orange Blossoms.** N. B. G. E.—An analysis by the *New Idea* showed the suppositories sold under the above name to be composed of:

Zinc sulphate.....	1	dram
Alum.....	15	grains
Cacao butter.....	3	drams
White wax.....	1/4	dram
Expressed oil of almonds.....	1 1/4	drams
Extract of hyoscyamus.....	1	grain

We are unable to place the other formulas which you ask for.

**Pilocarpine Hair Wash.**—W. C. S. writes: "I will thank you if you will kindly give in an early issue a recipe for a fluid hair tonic with pilocarpine muriate as the important ingredient."

The following formula gives a satisfactory product:

Pilocarpine muriate.....	4	grains
Oil of rosemary.....	1	drachm
Oil of bergamot.....	1 1/4	drachms
Oil of lavender.....	1 1/4	drachms
Strong solution of ammonia.....	3	drachms
Tincture of cantharides.....	3	drachms
Castor oil.....	2	ounces
Alcohol, to make.....	20	ounces

The pilocarpine and oils are dissolved in some of the alcohol, then the tincture is added and the ammonia, and enough spirit to make up the required volume.

The scalp is to be thoroughly cleaned by washing with warm soap and water containing a little borax, and dried; the tonic is then applied with a small sponge.

**Dentists' Arsenic Paste.** P. S.—This is made after various formulas. The one given below may be taken as a type. The paste is used by dentists for the destruction of exposed nerves:

White arsenic.....	2	drams
Morphine sulphate (or cocaine).....	4	grains
Glycerin and water equal parts to make a paste.		

**Marshmallow Paste.** I. B.—The popular Marshmallow paste is *Marshmallon* in name only. It is official in several foreign pharmacopoeias under the title "gum paste." As usually made it consists of 23 parts each of gum arabic and sugar, 3 of orange flower water and 8 of white of egg.



The paste is evaporated to the proper consistency and dried on the surface in the air.

**Paine's Celery Compound.** T. F. B.—A good imitation of the original is said to be furnished by the formula printed below as follows:

Celery seed, powdered	2 ounces
Red cinchona	1 ounce
Orange peel	1 ounce
Coriander seed	1/2 ounce
Lemon peel	1/2 ounce
Muriatic acid	15 minims
Alcohol	5 fl. ounces
Glycerin	3 fl. ounces
Water	4 fl. ounces
Syrup	4 fl. ounces

Mix all the drugs and grind to about No. 40 powder.

Add the mixture of acid, alcohol, glycerin and water; macerate 24 hours, then percolate, adding enough alcohol and water in the proportion given to make 12 fl. ounces. Add the syrup, and if necessary filter.

**Etchene.**—I. B., writes: "Please tell me the composition of Etchene—a liquid used for transferring printed matter."

Etchene is said to consist of a 5 per cent. solution of caustic potassa, containing a trace of an essential oil.

**Merck's Euonymin.** F. P. McH.—According to Merck & Co. this is a powdered hydro-alcoholic extract of the bark of *Euonymus atropurpureus*. It is a cholagogue cathartic and is given in doses of Grm. 0.10–20. The uncrystallizable Euonymin of Wenzell (*Amer. Jour. Phar.*, Sept., 1892) is obtained by heating tincture of wahoo with chloroform; a dark yellow substance is separated, from which ether dissolves a golden yellow resin. The insoluble portion is dissolved by alcohol, a resin is precipitated by lead acetate, and the lead removed from the filtrate; upon evaporation euonymin—a bitter substance insoluble in water, soluble in alcohol and ether—is left.

**Green's Nervura.** C. L. K.—Fisher says this may be duplicated by the following formula:

Coca	8 ounces
Damiana	8 ounces
Gentian	8 ounces
Bromide potash	1/2 ounce
Salicylate soda	1 ounce
Dandelion root	8 ounces
Alcohol	1 quart
Glycerin	1 pint
Water, q. s.	1 gallon

Grind the vegetable drugs to about No. 40 powder; add the alcohol and glycerin with an equal measure of water; macerate 24 hours, then percolate, adding enough alcohol and water in the proportion given to make one gallon.

## Correspondence.

### "Thoughts on an Elixir."

Editor AMERICAN DRUGGIST:

In "Thoughts on an Elixir" in your issue of March 22 you ask for the experience of pharmacists with the Elixir Ferri. Phos. Quininae et Strychnae. Here is ours:

1st. Don't try to get either a permanent or water miscible preparation from the N. F. formula.

2d. In its place use Elix. Pyrophosphate Ferri. Quininae et Strych. This, if made after the following formula, will afford a beautiful, absolutely permanent and water miscible preparation. Of this there is no doubt. We have used it for over seven years and are positive. Here is the formula—try it and believe. It will cost about 30 cents a pint.

Quin. sulph.	64 grains
Strych.	2 grains
Ferri. pyrophos. (Squibbs)	240 grains
Sodii citratis	60 grains
Alcohol	2 fl. ounces
Aque	1 fl. ounce
Glycerini	3 fl. ounces
Elix. simplicis	q. s. ad. 1 pint

Put the quinine and strychnine in a flask with the alcohol and five ounces of simple elixir. Place the flask in water and heat, occasionally shaking till contents of flask are dissolved. Dissolve the iron salt in the one ounce of water without heat (rub it down in a mortar) and add the citrate of sodium and the glycerin. Mix the two solutions and when cool add enough simple elixir to make a pint. We claim no credit for this formula. That belongs to C. R. Bechman of Fountain City, Wis. The formula was originally published in *The Medical and Surgical Reporter*. A. M. PATT & SON, WINONA, MINN., April 12.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Heubner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

FOURTH PRIZE.—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

### Names of Students whose grade stood 75 on Questions 16 to 31.

W. J. Adams, Manchester, Va.  
E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. Wm. L. Becker, Dubuque, Iowa. Heywood Boone, Clinton, Ky. John W. Brewer, Lake Preston, S. D. W. E. Bruce, Boston, Mass. J. C. Boyer, Wisconsin, Pa.

Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Lester Carde, Woonsocket, R. I. Henry E. Culbert, Newark, N. J. Chas. S. Clark, Shamokin, Pa. Chas. S. Cogley, Lowell, Mass. W. P. Craig, Indianola, Miss. Chas. L. Chapple, Minneapolis, Minn.

A. P. Davis, Redwood Falls, Minn. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. John J. Gregan, Warren, Mass. William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.

L. Harding, Fergus Falls, Minn. Frank Hartmann, Middletown, Conn. H. B. Harrop, Columbus, O. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. H. Heinzel, West Superior, Wis. F. G. Hill, New York City. Seymour Hull, Hooick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

Wm. L. Knuth, Springfield, Ohio.  
J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. C. W. Linch, Lewisburg, Pa. M. D. Lingler, Philadelphia, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. T. L. Mills, Boston, Mass. Arthur Mourl, Houghton, Mich. Thomas J. Murphy, East Bradley, Pa. W. B. Nethery, Toronto Junction, Ont. Ralph L. Nye, Skowhegan, Me. John T. Ogle, New York City.

Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala. T. J. Quirin, Santa Clara, Cal. A. V. Rand, Wolfville, N. S. M. E. Read, Wauson, Ohio. Paul F. A. Rudinek, Chicago, Ill. C. D. Savinnet, New Orleans, La. Clinton Sellers, Kencordino, Ontario. Wm. E. H. Schneider, New York City. Edgar B. Scott, Norfolk, Va. William W. Scott, Highland Falls, N. Y. L. W. Simonds, Providence, R. I. Alber Z. Smith, Clarkburg, W. Va. Clarence D. Snavely, Lebanon, Pa. Moses W. Somers, Boston, Mass. A. W. Walter Spingler, Toronto, Ont. Dan G. Sullivan, Hooke, Mass. Walker L. Stephens, Philadelphia.  
Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter A. Tichenor, Brooklyn, Miss Edith Tompkins, Jasper, Fla.  
W. H. Van Strander, Winsted, Conn. Chas. G. Vernon, Florida, N. Y.  
M. D. Martin, Redwood Falls, Minn.  
Bertie Ward, Orange, N. J. Miss Emma A. Wiggins, Exeter, N. H. Wood Wiles, Bloomington, Ind. John S. Wilson, Philadelphia, Pa. H. A. Woodward, Plainfield, N. J.

### Questions—Fifth Series.

#### PHARMACOGNOSY.

References:—"Principles of Pharmacognosy," by Flückiger and Tschirch; translated by Power; also chapters on morphology and structural botany in botanical textbooks.

1. What is a stem and what is its characteristic difference from a root?
2. What is a bulb, a corm and a tuber?
3. What is a rhizome?
4. What is a stolon?
5. Name four varieties of racemose inflorescence.
6. What is a cyme?
7. Name two kinds of indehiscent fruits.
8. Name two kinds of dehiscent fruits.
9. Name two kinds of fleshy fruits.
10. Name two kinds of dry fruits.

### Answers to Questions 16 to 36.

16. When a chemical compound is decomposed by an electric current, the elements separated at the positive pole are called electro-negative, and those at the negative pole electro-positive. The same element may be either electro-positive or electro-negative in regard to different elements; e. g., sulphur is electro-negative toward hydrogen, but electro-positive toward oxygen.

17. Bodies so hung or supported that when pulled to one side they try to return to their first position are in stable equilibrium. A pendulum, or a modern, iron bottomed cuspidore is in stable equilibrium.

When the body after being disturbed falls into a new position, rather than return to its first position, it is in unstable equilibrium. A plank standing on end or the toy top is unstable.

18. The specific gravity of a body is its weight compared with the weight of an equal volume of some other body. This other body with which the comparison is made is generally water for liquids and solids and air or hydrogen for gases. Specific volume is the volume of a body compared with the same weight of the other body or standard.

20. "Temperature remaining the same, the volume of any gas varies inversely as the pressure brought to bear upon it."

It is only approximately true, as it is found, that carbon dioxide, hydrogen sulphide, ammonia and cyanogen are more compressible than air; hydrogen, which has the same compressibility as air up to fifteen (15) atmospheres, is then less compressible. From these and other experiments it is concluded that Boyle's law is not general.

21. The differences between dynamic (developed by power) and galvanic (developed by chemical action) electricity

are more in their mode of production than in their properties; both have low potential pressure and high amperage or intensity. Static electricity, on the contrary, has high pressure and but little quantity. Static electricity may be further defined as the electricity of charge or surface and will also remain for a great period unmoved. Galvanic and dynamic electricity are the electricities of current or flow and pervade all parts of their conductor.

22. Grove's cell consists of a glass or earthenware jar containing dilute sulphuric acid (about 1 to 12), in this acid is placed a hollow cylinder of zinc, within this cylinder stands an unglazed, and thus porous, jar or cylinder containing nitric acid in which is suspended a slip of platinum.

Substitute a strip of carbon for the platinum, every thing else remaining the same, and the cell is then called the Bunsen.

The Leclanché cell has an outer jar of glass containing a solution of ammoniac chloride (sal ammoniac). In this solution is placed a rod of zinc; a porous cup in the solution has within it a sheet or strip of carbon surrounded by small fragments of manganese dioxide.

23. Induced currents of electricity are those produced, without contact or conduction, by the mere presence of another conductor through which a current is passing or of a magnet.

24. Surround a core of iron wire by a coil of three or four layers of coarse insulated copper wire and bring the ends out to binding posts. About this first coil wind many turns of fine, insulated, copper wire and let these ends go to binding posts also. In line with and opposite one end of the iron core support a flexible strip of brass having at its outer end a piece of soft iron. Now connect one wire from a Bunsen or other cell to one of the wires from the inner coil. The other battery wire is led to the support which holds up the piece of brass. This piece of brass, when at rest, is in contact with an adjusting screw to which a wire is now carried in such a manner as to complete the circuit through the secondary coil; no sooner is the circuit complete than the coil of iron becoming magnetic draws the piece of soft iron toward it and thus breaks the circuit. The brass then returns to its first position and the same thing is repeated until the battery is exhausted. Each time a circuit is made or broken an induced current flows through the secondary coil and is taken out by the wires to the handles or anything that may be attached. Some coils have an attachment known as a condenser connected in the primary circuit. In the so-called medical coil the action is in no essential respect different from that just given. The induced current has strong physiological action.

25. If a current is passed through a compound, as described in answer 16, decomposition takes place and the electro-negative and positive elements which separate are called electrolytes; the process is electrolysis.

26. Calomel is variously known as mercurous chloride, sub chloride, mild chloride,  $Hg_2Cl_2$ .

There are three methods of preparation: trituration, precipitation, and sublimation. The last is the official method and consists in subliming a mixture of mercury, mercuric sulphate and common salt; the sublimate is condensed either by a current of steam or cold air. The impurities liable to be present are mercuric chloride, ammoniac-mercuric chloride, and

the chloride, carbonate, phosphate and carbonate of calcium.

27. Senega is the root of polygala senega and is a native of North America. Its range is about as follows: North to Canada south to North Carolina, west to the Rocky Mountains. It is principally obtained, however, from Kentucky, Tennessee, North Carolina, Arkansas, Missouri, Wisconsin and Minnesota. Senega is a stimulant, expectorant, diaphoretic and diuretic, and is largely used in colds where the throat is involved on account of its first two properties.

28. When spirit of nitrous ether is combined with fluid extract of uva ursi there is formed quantities of a gas charged with nitrous compounds of an explosive character, sufficient generally to blow out the cork or burst the bottle. This has been supposed to be due to the action of free acid in the spirit of nitrous ether, but this view has been questioned and it is stated that the same results occur if a perfectly neutral article be used and also that it occurs with many other substances containing tannin.

29. It is also known as white liniment, St. John Long's liniment, etc., and is composed as follows:

Oil of turpentine.....	fl. 3	iii
Fresh egg, albumen and yolk.....		
Oil lemon.....	℥	ix
Acetic acid, U. S. P.....	℥	ccc
Rose water.....	fl. 3	iiiss

30. Guaiacol is a methyl ether of pyrocatechin and is obtainable from several sources, but is best obtained by fractional distillation of beech wood creosote. It is a liquid of agreeable odor, boiling at 206° C., and having a specific gravity of 1.33 at 15° C.

Pure guaiacol is a crystalline solid m. p. 28.5° C., b. p. 205° C. The ordinary form is a colorless liquid of sp. gr. 1.117, b. p. 200° C. It is slightly soluble in water, but easily so in alcohol, ether, acetic acid and alkalies. With the alkaline earth it forms crystalline salts, and by its alkaline solutions the salts of gold, silver and copper are reduced. By heating with hydriodic acid or fusion with potash, it is resolved into pyrocatechin and methyl iodide or methyl alcohol. The alcoholic solution gives, on the addition of a trace of ferric chloride, a blue color which turns to emerald green when more ferric chloride is added. This reaction is characteristic. When liquid guaiacol is mixed with conc. sulphuric acid it gives a faint yellow coloration, which is changed to cherry red by the addition of a small portion of acetone (Helbing Modern Materia Medica).

### Philadelphia.

The exercises of graduation week at the Philadelphia College of Pharmacy were opened on the evening of the 12th by the 30th reception of the Alumni Association of the Philadelphia College of Pharmacy to the 73d graduating class of 1893-4 which was given at Association Hall, Fifteenth and Chestnut streets.

There was a large gathering of the patrons of the college. David H. Ross, of the class of '78, presided and made the opening address. A fine musical programme was rendered. Howard P. Zeigler of Reading, Pa., delivered the oration, and George L. Kappes of Zanesville, O., read the class history.

The alumni gold medal for the highest general average was presented to George W. Lufte of Salt Lake City, and David L. Greenawalt of Chambersburg, Pa., received the certificate for the highest junior average.

Certificates were awarded to the graduates as follows:

Pharmacy—John Culley of Ogden, Utah  
Chemistry—Charles E. Hamilton, New Lisbon, O.  
Materia Medica—Charles C. Manger, Boonville, Mo.  
General Pharmacy—Charles Jeffries Black, Chambersburg.  
Operative Pharmacy—Lewis Reese, Hazleton.  
Analytical Chemistry—Edward Hodgson, Norfolk, Va.

Specimens—Frank H. Atkins, Lebanon.

Special prize certificate for the best collection of botanical specimens to Angus Gerhard Wagener of Germany.

During the year 185 members of the Alumni Association were elected and there were nineteen deaths.

At the 30th meeting of the alumni in the college rooms during the afternoon, these officers were elected for the ensuing year:

President, William Lincoln Cliffe, of the class of '84; first vice-president, Jacob S. Bertram, class of '78; second vice-president, Dr. J. Louis D. Morrison class of '88; treasurer, Edward C. Jones, class of '64; secretary, William E. Krewson, class of '66; corresponding secretary, Joseph Crawford, class of '84; trustee of sinking fund, Thomas S. Weigand, class of '44.

The 73d annual commencement of the Philadelphia College of Pharmacy was held on Tuesday evening, April 17, at the Academy of Music, 184 graduates receiving the degree of Ph G. Charles H. Bullock, president of the college, occupied the chair and conferred the degrees.

Daniel Heine and David T. Werner received certificates of proficiency in chemistry and the degree of Master of Pharmacy (Ph.M.) was conferred on Albert E. Ebert, Charles Rice, Robert Shoemaker, and Edward R. Squibb.

Prizes were awarded to the graduates as follows: Remington gold medal, William C. Anghinbaugh; the Maist prize, \$20, George Franklin Bauch; chemical balance and \$25, John Cully; the Robinson gold medal and chemical balance, Charles X. Manger; \$20, Louis Reese; microscope, William H. Whitcomb.

Prof. Samuel P. Sadler, Ph.D., delivered the valedictory address to the graduates, and Prof. Joseph P. Remington, Dean of the Faculty, also made a short address.

### Association Notes.

THE GEORGIA BOARD OF PHARMACY will meet in Americus May 7 to examine candidates for druggist, apothecary and pharmacists' license. The percentages required are respectively 65, 75 and 85. At this meeting the board will also award the prize memberships in the American Pharmaceutical Association. Those who expect to attend should notify the secretary, Dr. Henry R. Slack, Lagrange. The board will hold over and attend the meeting of the Georgia Pharmaceutical Association, which assembles there on the 8th and 9th of May.

OHIO ASSOCIATION.—The sixteenth annual meeting of the Ohio Pharmaceutical Association will be held in Cincinnati June 5, 6 and 7, 1894, instead of the time originally set. This meeting promises to be the most successful and best attended the association ever had. Cincinnati will outdo herself this time, and a most cordial invitation is extended to the entire drug fraternity in the State to come to the first city in Ohio and partake of its hospitality. All communications for securing hotel accommodations, etc., should be addressed to Albert Wetterstrom, local secretary, 435 Colerain St., Cincinnati.

Blank applications for membership can be secured from any member or the secretary. See official notice later. Lewis C. Hopp, secretary, 198 Euclid avenue, Cleveland, O.

### The Tax on Alcohol.

Powers & Weightman, the widely known manufacturing chemists, Philadelphia, in a circular addressed to the honorable members of the U. S. Senate and House of Representatives and the trade under date of April 9, have the following remarks on the suggestions in both House and Senate Tariff bills to increase the internal revenue tax on distilled spirits, and, at the same time, to decrease the customs duties on imported alcoholic preparations.

Your attention is respectfully directed to the inadequate rates of duty imposed upon a number of preparations in which Alcohol is used in the manufacture, in both the House and Senate Tariff bills.

To the manufacturing chemist alcohol is as essential as iron is to those engaged in many other branches of industry; and the internal revenue tax on distilled spirits is a burden very severely felt by American producers, especially where they are obliged to compete with manufacturers abroad who enjoy great advantages by having free solvents, suitable for many of their processes.

The internal revenue tax on a single barrel of 64 per cent. alcohol, say 47 gallons, per the Senate Bill, will amount to \$67.20.

Without tax alcohol would sell at from 26 to 30 cents per gallon.

With present tax it sells, in carload lots, at about \$2.50 per gallon.

The quantity of alcohol consumed for medicinal, and manufacturing purposes, and for the arts, is very large, and, as a consequence, the tax paid by manufacturers is enormous there being no discrimination made in the United States in favor of those who are obliged to employ alcohol for the uses named.

In the face of proposing to increase the tax on distilled spirits from 50 cents to \$1 per proof gallon, by the House bill, and from \$1 to \$1.10, by the Senate bill, the suggestions in the house are to reduce duties on imported alcoholic preparations, and in the Senate to allow the reduced rates of the house bill to remain unchanged.

The result is that the internal revenue tax exceeds the customs duty in several instances.

Such propositions have been made, apparently, without reference to the fact that customs duties, in all European countries, are adjusted so as to counter-balance, or compensate for, the excise taxes, or inland duties.

We are quite at a loss to understand why such an inconsistency has been permitted to form part of a tariff bill, inasmuch as attention was called to the insufficient rates of duty in ample time for correction.

An inconsistency and injustice of this character is so self-evident that it demands rectification, irrespective of the views of any one on the great dividing question of protection to home industries vs. unrestricted foreign competition.

We ask attention to the tabulated statement herewith presented.

	Under Present Law.	Under House Bill.	Under Senate Bill.
Internal-revenue tax on one proof gallon distilled spirits.*	90 cts.	\$1.00	\$1.10
Customs duty on one proof gallon distilled spirits.*	\$2.50	\$1.80	\$1.80
Internal revenue tax on one wine gallon 94 per cent. alcohol.	\$1.692	\$1.88	\$3.068
Customs duty on one wine gallon 94 per cent. alcohol.	\$4.70	\$3.894	\$3.894
Internal revenue tax on the alcohol in one pound sulph. ether.	85 cts.	89 cts.	48 cts.
Customs duty on one pound sulph. ether.	40 cts.	85 cts.	85 cts.
Int. rev. tax on the alcohol in one pound spts. nitrous ether.	25 cts.	28 cts.	30 cts.
Customs duty on one pound spts. nitrous ether.	25 cts.	20 cts.	20 cts.
Internal revenue tax on the alcohol in the sulph. ether lost in making one pound of tannic acid, or tannin.	47 cts.	52 cts.	57 cts.
Customs duty on one pound of tannic acid, or tannin.	75 cts.	85 cts.	85 cts.

It shows that the customs duty on alcohol is so enormous as to be absolutely prohibitory. Hence American manufacturers are forced to buy, exclusively, alcohol made in the United States, and to pay such prices as may be demanded by those who, by Government enactment, need fear no foreign competition.

The present customs duty on one wine gallon of 94 per cent. alcohol is \$4.70. The present internal revenue tax is \$1.692 per wine gallon—a difference of \$3.008 per gallon.

It shows that—by an entirely contrary process—the internal revenue tax on the alcohol used in the making of one pound of sulphuric ether (as proposed

by the Senate rate of \$1.10 per proof gallon of distilled spirits) will amount to 35 cents, and yet, against 45 cents imposed upon American manufacturers the customs duty levied upon sulphuric ether made in foreign countries is to be 35 cents.

We are unable to comprehend why the customs duty on one gallon of alcohol should be three dollars (\$3) higher than the internal revenue tax, as now, or \$1.50 higher as per House bill, or \$1.32 higher, as per Senate bill; while the customs duty on one pound of sulphuric ether of German, French, or English make is to be eight cents (8 cts.) less than the internal revenue tax on the alcohol used by American manufacturers in making one pound sulphuric ether.

The present duty on sulphuric ether is 40c. per pound.

The House rate is 35c. per pound.

The Senate rate is 35c. per pound.

One gallon of alcohol weighs 6.80 pounds.

One hundred pounds of alcohol will make 70 pounds sulphuric ether.

One gallon of alcohol, or 6.80 pounds, will make 4.76 pounds sulphuric ether.

The tax on one gallon of alcohol, is, therefore, to be distributed over 4.76 pounds of sulphuric ether.

At 90 cents on proof spirits per gallon the tax on one pound of sulphuric ether is 35-35 cents against 40 cents customs duty.

At \$1 on proof spirits the tax will be 30 cents. The customs duty proposed by the House is 35 cents, or 5 cents less than the tax.

The customs duty suggested by the House, and agreed to by the Senate committee, is 35 cents, or 5 cents less than the tax.

Legislation such as this will simply suspend the manufacture of sulphuric ether in the United States, as it will any article where the excise tax exceeds the customs duty.

#### SPIRITS NITROUS ETHER.

One pound of spirits nitrous ether requires about 1 lb. of alcohol.

At the present rate of tax on distilled spirits, 90 cents per gallon, or \$1.692 per gallon on 94 per cent. alcohol, the tax on the alcohol in one pound of spirits nitrous ether is about 25 cents.

The present duty on spirits nitrous ether is 25 cents per pound, which is a countervailing duty only.

With the House bill tax of \$1 on distilled spirits, or \$1.88 on 94 per cent. alcohol per gallon, the tax on one pound of alcohol required for one pound spirit nitrous ether, is 28 cents.

The proposed House bill duty is 20 cents per pound on spirits nitrous ether or about 8 cents less than the tax.

The Senate bill increases the tax to 30 cents per pound and leaves the House rate of duty remain at 20 cents, so that the internal revenue tax exceeds the customs duty 10 cents per pound.

#### ACID TANNIC, OR TANNIN.

(Made of nutgall in fine powder and sulphuric ether.)

Present duty, 75 cents per pound.

House bill, 35 cents per pound.

Senate bill, 35 cents per pound.

The Senate rate of tax on distilled spirits will make the tax on the ether lost in making one pound acid tannic, or tannin, about 57 cents per pound, while the customs duty suggested is but 35 cents per pound.

The amount of ether required is somewhat variable, but the figures named we regard as a fair average.

We consider 75 cents (the present rate of duty) on a pound of acid tannic, of official quality, as a reasonable and proper rate, and trust that it will be maintained, and that the 35 cents may be stricken out.

When the bill, known as the Mills bill was formulated there was entire willingness expressed to leave rates on all alcoholic preparations undisturbed in view of not changing the spirit tax; whereas, in the present case, the House advances the spirit tax 10 cents per gallon, and reduces the customs duties, and the Senate committee still further advances the spirit tax 10 cents per gallon, while allowing the reduced customs duties of the House bill to remain unchanged.

By reference to the tariff law of Great Britain you will find that duties are imposed on alcoholic preparations at least sufficient to countervail the inland revenue tax; as, on chloroform, chloral hydrate, colloidion, ether sulphuric, ether acetic, etc.; so that, inasmuch as Great Britain grants protection to none, the question for consideration, there, was one of simple justice and consistency, and not of protection.

That the excessive internal revenue tax on alcohol is already burdensome enough to manufacturers we hardly think can be disputed.

That it is but a measure of justice not to discriminate against manufacturers of your own country we are sure you will grant to be sound policy.

That in adjusting customs duties on alcoholic preparations of foreign manufacture care should be taken to see that they shall at least compensate for the inland taxes imposed upon your own fellow citizens, especially in view of the fact that many countries have laws granting free methylated spirits, or other solvents, to their manufacturers, we think will be admitted to be correct.

In the United States the tax on the distilled spirits entering into the alcohol used for medicinal and manufacturing purposes, and for the arts, is pre-

cisely the same as when the spirits are used for drinking purposes.

There are other items of similar character to those cited, to which your attention might be directed, and, doubtless, information will be given by manufacturing chemists, if desired.

### How to Describe a College Commencement.

As the commencement season approaches the following draft for writing up advance reports has been compiled from various reports in New York trade papers and may serve a useful application. By filling the blanks it can be used indefinitely.

The closing exercises of the ..... College of Pharmacy were celebrated at the Academy of Music with unusual brilliancy and success on ..... Professor X.....' orchestra furnished an admirable musical entertainment, opening the interesting programme with the overture from "Luftschlösser" by Suppé. The stage was expensively decorated with rare exotics and its front was completely covered with a vast array of floral gifts of all shapes and sizes, whose sweet odors, mingling with the strains of choice music by the string band and the superb eloquence of the orators aroused the profoundest admiration and delight of the audience.

The graduating class was very large and as fine a body of young men as ever graduated from any college; its entrance and when it marched upon the stage with the step and precision of drilled cadets, headed by the trustees, the faculty and the invited guests, was the occasion of overwhelming demonstration on the part of the large and enthusiastic assemblage which crowded every part of the house. The band received them with the "Krönungs marsch." The opening prayer by Rev. .... was abounding in devotional eloquence. "The Lost Chord" was then most delicately rendered by the band and when the applause ceased, the address to the class by the chief orator of the evening, the Hon. ...., was delivered with much feeling; it abounded in felicitous thoughts, beautiful and appropriate imagery and sound advice to the graduates, and quite brought down the house. After some choice pieces by the string band, the address of the president of the college followed; it was sparkling with wit and humor and with due eulogium of the exalted position so early and honorably won by the learned graduates. The distribution of the diplomas and of the prizes awarded by the members of the faculty, the college and the Alumni Association to the honor-men was the occasion of the wildest enthusiasm and applause by the entire house. The sentiments of the valedictory oration were singularly fitted to the occasion and evidently much affected the lady friends of the graduates, representing the beauty and grace of the city, as also the eminent professors who were to lose the most intelligent class of students ever gathered in any college of pharmacy in the world. The enthusiasm, however, reached the climax when the distribution of the magnificent floral gifts took place, while the band played the "Lustige Musikanten" by Muscat and some of the polkas and waltzes of Strauss. These and the continuous applause brought down the house completely. The exercises closed with a stirring march and the familiar strains of "Auld Lang Syne" by the band. Altogether the occasion was one long to be remembered by all participants and was an immense credit to the ..... College, its efficient officers and its grand work.

\*In England the inland tax on one gallon proof spirits is 10 shillings. The customs duty is 10 shillings, hence—difference 4 pence, or 8 cents. Here the difference, under present law, is \$1.60 per proof gallon.

## New York.

T. A. Hedley, F.C.S., formerly director of the laboratories of Evans & Sons, limited, is in the city in connection with the Montserrat lime fruit juice, having been appointed traveling salesman for the company. He is about to take up his residence at Boston, Mass.

Edward Evans, Jr., of the firm of Evans, Sons & Co., Liverpool, arrived in New York on April 10. Alfred B. Evans, managing director of Evans & Sons, limited, Montreal, met his brother, and, after remaining here a few days to complete arrangements for pushing the sale of Montserrat lime fruit juice in the United States, will proceed to Montreal.

A beautiful specimen of Truxillo coca is now in full bloom at the United States nurseries of Pitcher & Manda at Short Hills, N. J. This is probably the first time that this plant has ever been seen in bloom in the United States, and Prof. Rusby, who has examined the blooming plant carefully, states that he is more inclined now than ever before to consider the plant as a distinct species, though not yet wholly convinced of it.

James Parke, a son of Harvey C. Parke, head of the firm of Parke, Davis & Co., manufacturing chemists, has been missing from his place of business in this city since Thursday last, and his friends do not know what has become of him. They are beginning to be greatly worried. His home is in Detroit, where Mr. Harvey C. Parke lives. Mr. Parke is 26 years old. His habits are exemplary, and he is attentive to business. He came to New York to learn the business under the tuition of John Clay, the manager of the New York branch.

## Michigan Mention.

Julian E. Doty of Grand Rapids has filed a chattel mortgage on his stock of jewelry and drugs for \$140.

Dr. Chas. Norton, who keeps a drug store at Kilmaster, was arrested last Wednesday, charged with selling liquor without a license. He gave bonds for his appearance.

The Baron Pharmacy Co. have opened up a magnificently appointed cut rate drug store at 180 Woodward avenue, Detroit. Tufts of Boston furnished the soda fountain, which cost \$5,000.

Frederick Klix was tried and found guilty last week of burglarizing the drug store of C. K. Trombley, Detroit. He was remanded to jail for sentence. William Singer and Theodore Couture, alleged accomplices, were acquitted.

A meeting of manufacturers, wholesalers and retail drug dealers of many cities was held at Detroit last week for the purpose of perfecting the details of the Detroit plan adopted at the meeting of the N. W. D. A. held there last year. It will be known as the Universal Trade Association, the purpose of which is to crush the cut-rate dealers. The idea is to sell patented labels to be used on all patent medicines. The control of these will be delegated to an inside association of retail druggists, the United Trade Society. Manufacturers of proprietary articles who wish to do business with retail druggists must purchase these labels. They will be in two parts, one for the outside and the other for the inside of the packages, and will be numbered consecutively so that the goods can be invoiced by number from manufactur-

ers to wholesalers and from the latter to the retail dealer. The labels will be of different sizes to suit the goods, and will be of three colors, red, green and black. The red will be used for 35 cent articles, green for 50 and black for \$1. Their cost per 1,000 will be graded according to the price of the goods, and the profits will be divided pro rata among the members of the association. The plan will be worked from a central bureau, either at Chicago or Detroit. This bureau will look after the printing and sale of labels and the detection of offenders. Labeled goods sold by cutters or found in their possession will be traced to the manufacturers and through him to the dealer. Manufacturers will be required to stipulate in their contracts with jobbers that all goods shipped to cutters shall be taken up by society agents and returned to the jobber who supplied them, when the latter will have to pay the cut prices and the expense of redeeming and returning the goods. If he refuses then the manufacturer will be required to do so on demand. The names of the manufacturers and wholesalers in good standing will be published from time to time. N. Hayes, one of the promoters of the organization, says the object is to keep prices up to a normal figure and to do away with cut rate drug stores. There are 100 clerks out of employment in Detroit owing to the recent general cut rate movement.

## Boston.

The druggists of Lawrence and the surrounding towns of Methuen, Andover and North Andover have united and formed a local association, which is now a branch of the Interstate League. This is undoubtedly the banner association up to the present time for rapid organization. President Canning's presence was the talisman which brought this about and his address was a convincing elucidation of League principles, and the success which followed his efforts demonstrates, beyond question, that a thorough understanding of this plan is all that is necessary to win supporters. Here is the schedule as established by events:

The preliminary meeting, which was attended by nearly all the retailers in this district, was held at 2 P.M. April 9; before 4 o'clock a permanent organization had been effected which had voted to join the League. and within 48 hours from this time a check was received by President Canning for 100 per cent. of the druggists embraced in this district to consummate this vote. This result was not only complimentary to the organizer but augurs well for the new association and its capable officials.

President Cobb of the N. E. R. D. U. and all of the officials of that body with the exception of Vice-presidents Hyde and O'Hare met recently at Young's Hotel, Boston, to complete organization and arrange the many business details which devolve upon a new organization of this character. Enthusiastic reports were made by all present; Vice-president Duggan of Connecticut had already appointed his county officers and they had commenced work. Mr. Hazeltine of Portland, Me., was about to designate the county officials for his State. Mr. Bell of West Derry, N. H., was present and he is to take an active part in the organization of the retailers in his State. New England now seems to lead in this movement; why cannot other sections of the country do as well?

President G. W. Cobb of the New Eng-

land Retail Druggists' Union has had considerable literature published in circular form detailing the objects of his organization, which he will be pleased to send to those desiring information upon this subject. He has also some aids to the rapid formation of local associations, which he is prepared to furnish to those who will assist in their use.

P. J. Maguire has been added to the office force of James W. Tufts & Co., and he will make frequent trips in the interest of that firm throughout New England. Mr. Maguire knows "a thing or two" about fountains and has long represented his firm in Minnesota and Wisconsin. His genial disposition will win for him success and friends in his new field.

The proposed act regulating the sale of patent medicines, which was treated editorially in your last issue, has been reported upon adversely by the committee on public health. This probably disposes of the matter this year, but the nightmare will undoubtedly be resurrected at the next session of the legislature.

John H. Gilmore, who recently passed the Board of Pharmacy, is now clerking for his old employer, W. H. A. Perham of Lexington.

T. J. Kelly, Main street, Winchester, is now prepared to furnish his patrons with soda from one of Tufts' "Buckeye" fountains.

Salem has a new store; J. P. Roulier & Co. are the proprietors. This firm will draw soda from one of Tufts' fountains.

G. E. Thomas, M. C. P., '92, is receiving the congratulations of his friends upon his engagement to Miss Sears of Lynn.

M. L. Proulx, 189 Middlesex street, Lowell, has opened a new store, which is fitted with a Low Art Tile fountain.

T. J. Glennon and M. F. Storker, both of Lawrence, are recent purchasers of Low Art Tile fountains.

The store of George Rice, Framingham, was badly damaged by a recent fire.

## Trade Notes.

American manufacturers, who may have thoughts of finding a market for their specialties in England, will do well to write to Rankin & Co., merchants and manufacturers' agents, 7 Snow Hill, London, E. C., who guarantees all accounts and can give English and American references.

Retailers who wish to add a choice line of perfumes to their stock will do well to write to the Crown Perfumery Company, 160 Fifth avenue, New York, for a price list of their latest novelties. These goods are sold on very reasonable terms to the retail drug trade and are popular with the public.

The advertisement of the Mayell-Hopp Co., Cleveland, O., which appears in this issue, contains an unusually generous offer to the retail drug trade. The firm announces its willingness to send 200 handsome envelopes free of any cost to any druggist who cares to make application. A postal card will do.

Patrons may be convinced that the qualities of powdered extracts have been greatly advanced by an inspection of the character of those now offered to the trade by John Wyeth & Brother, Philadelphia. The result has been attained by a rigid adherence to all the more accurate requirements of skill and manipulation. See their advertisement in this issue.



A. L. Worden, M.D., Detroit, Mich., has discovered a new cure for diphtheria, which he is offering to the retail trade under the name "Protectio." In his advertisement in this issue he refers to it as a pleasant liquid which, if given in doses of a teaspoonful eight or ten times daily, will prevent diphtheria or scarlet fever, no matter what others about you are sick.

The E. T. Burrowes Co., manufacturers of ice cream cabinets, 72 Free street, Portland, Me., issue a catalogue of patented and improved ice cream cabinets. The cabinets are referred to in the circular as a profitable investment for any one who owns a soda fountain, and well adapted for the use of druggists. Copies will be sent free on request to any one mentioning this paper.

"I never robbed a man but once," said the honest tramp, and then I was starving. "He would not give me a penny, and I couldn't stand the gnawings in my stomach any longer, so I knocked him down and went through his pockets. What kind of a haul did I make? Just one little bottle that read on the label: 'Fairchild Pepsin Tablets; for that full feeling after eating.'—*Month. Mag. Phar.*

Wilmot Castle & Co., 28 Elm street, Rochester, N. Y., invite correspondence on their Arnold Steam Sterilizer. Druggists should be interested in the announcement of the firm which appears in this issue. The point is there made that the Arnold Steam Sterilizer is liked by druggists because it gives best satisfaction to customers and is profitable to sell. Why not drop a card to Wilmot Castle & Co. for particulars?

The advertisement of Henry W. Stecher, Cleveland, O., which appears in this issue, will remind druggists of the necessity of replenishing their stocks of Stecher's "Stick 'Em" Fly Paper before the summer season is wholly upon them. The point is made for this paper that old customers stick to it and new ones take to it. Wholesale druggists keep it or orders may be addressed to the manufacturer, Henry W. Stecher, Cleveland, O.

Druggists who will take the trouble to examine the Seidlitz powders put up by Chas. R. Doane will find that the claims of the maker as to the purity of the chemicals used and the accuracy of weight are justified by the facts. Correspondence with Chas. R. Doane, 22 Meserole street, Brooklyn, will show the saving which may be effected by purchasing the Doane Seidlitz Powders. He offers to send prices and samples to any reader of this journal who makes application.

The combination of creosote with cod-liver oil is regarded by the best authorities as the most efficient of all remedies used in the treatment of lung troubles. The advantage of having a reliable preparation containing these substances in proper combination will be readily appreciated. and Osmun's Emulsion of Cod Liver Oil and Creosote, as advertised to the readers of this journal by Chas. A. Osmun, the widely-known New York pharmacist, should command a wide sale. Druggists who wish to investigate the merits of this combination should write for a sample bottle to Chas. A. Osmun, 18 Seventh avenue, New York.

The well-known house of Williams, Davis, Brooks & Co., wholesale and manufacturing pharmacists, Detroit, Mich., have an interesting announcement in this issue with reference to Dabrook's Perfumes. To introduce the perfumes

more extensively, they offer to furnish with an assorted order of Dabrook's Perfumes to the amount of \$12 1 dozen Easel Perfumes free. This is referred to as an exceptional offer, equivalent to 25 per cent. discount on the purchase required. Druggists will find it to their advantage to procure a copy of Williams, Davis, Brooks & Co.'s latest price list, which will be cheerfully furnished if this paper is mentioned at the time of writing.

The Amick Chemical Co., 166 West Seventh street, Cincinnati, O., issued a neat brochure on "Diseases of the Lung." The author is Dr. W. R. Amick, who has attained a wide celebrity of late by his successful Chemical Treatment of Consumption. The book is written for physicians and contains an interesting and valuable summary of the conditions attending diseases of the respiratory tract. A number of excellent prescriptions for the treatment of complications in consumption are given—gastric disorders, night sweats and hæmoptysis coming in for mention. Druggists who wish a copy of this interesting brochure can procure one by applying to the Amick Chemical Co., 166 West Seventh street, Cincinnati, O.

### Therapeutics of Antikamnia.

T. D. Finck, M.D., Kentucky School of Medicine, Louisville, says: "I am convinced there is no remedy so useful and attended with such satisfactory results in the treatment of melancholia with vasomotor disturbances, anemic headaches, emotional distress and active delusions of apprehension and distrust, as antikamnia. It also increases the appetite and arterial tension, as well as being particularly serviceable in relieving the persistent headache which accompanies nervous asthenia.

As an antiseptic and antipyretic and antiperiodic, it is good, nothing better. It is especially beneficial in spasmodic asthenia, in hay fever, in whooping cough, in headaches, particularly of the nervous variety, also that from disorders of the digestive organs, or from the various neuroses.

In mild hysteroid affections, in the various neuralgias, particularly ovarian, in the nervous tremor so often seen in confirmed drunkards, also in delirium tremens, it is of particular service.

The pain of locomotor ataxia yields to treatment with antikamnia in a remarkable degree, its analgesic power being of a peculiar kind, in that it will relieve painful affections due to pathological conditions of the peripheral nerves, as neuritis, etc.; also lumbago, sciatica and myalgia.

When pain is the prominent symptom, it is a desideratum, as its province is relief of pain in any and every form. And best of all, there is no danger of morphinism, no nausea nor malaise so common with opium and its preparations."—*Cincinnati Lancet Clinic.*

### Essential Oils, Etc.

Fritzsche Brothers (branch of Schimmel & Co., Leipzig), 34 Barclay street, New York, issue price list of essential oils, quintessential oils, musk, chemical preparations, pomades, fruit essences, triple extracts, extra concentrated extracts, ambergris and sundry perfumers' supplies, including powdered aromatics, and tinctures for perfumers. Copies of this list can be had upon application to Fritzsche Brothers at the above address.

## Notes on Prices.

### Chemicals.

The Roessler & Hasslacher Chemical Co., 73 Pine street, New York, in their circular for April state that a steady market was the distinguishing feature of the last month.

HYPOSULPHITE OF SODA.—Prime White German is scarce on the spot, and this, coupled with a good consumptive demand, has given us a firmer market.

OXALIC ACID.—Manufacturers' prices continue at the advance, with second hand, however, there is an inclination to cut prices, making the market unsteady and uncertain.

QUININE in second hand weakened somewhat toward the close of last month, but without any fundamental reasons therefor, as all the recent bark sales resulted in higher prices. If any change of price on part of the manufacturers is looked for, it can only be in a still further advance.

PEROXIDE OF SODIUM we recommend as a means to obtain pure oxygen quickly. Although it has been put to this use for some time, we nevertheless wish to call your special attention to it, as it may prove of great value to the chemist and druggist, whom it would not always pay to keep a cylinder of compressed oxygen on hand, but who could, at small expense, put in a few pounds of peroxide of sodium for the purpose of making oxygen when required. Oxygen is obtained by simply allowing water to drip through a tube on some peroxide of sodium placed in a vessel, which should be metallic, on account of the heat evolved by the reaction. For the same reason it might also be well to place the vessel with peroxide of sodium in a dish with cold, or if possible, iced water. The water coming in contact with the peroxide of sodium causes the omission of oxygen, and the residue finally remaining is chemically pure caustic soda, which can also be conveniently used.

### Chicago Prices.

Morrisson, Plummer & Co., importers and jobbers of drugs and manufacturing chemists 200 Randolph street, Chicago, issue their monthly prices current under date of April 3. Referring to the business situation they say there is but little change to note in the condition of the drug market. Jobbers are fairly busy, but orders are, as a rule, confined to current wants. Their further comments on the important features of the market are as follows:

ACETANILID.—Manufacturers have agreed upon a scale of prices somewhat higher than recent quotations, competition having reduced this article to an unprofitable basis.

ACIDS.—Carbolic, crude 30%, we offer in barrels at 50 per gallon. Tartaric seems to have touched bottom.

BALSAMS.—Copaiba is in good request at former rates. Fir, Canada, somewhat easier. Peru has improved in value owing to limited supplies in the primary markets.

BLUE VITRIOL, in large demand, and owing to increasing scarceness, is higher.

CALOMEL and other mercurials are slightly lower.

CAMPOR, refined, declined 3 to 4c. lb. in March.

CHLORAL HYDRATE is somewhat firmer.

COCAINE, MUR., is selling at 5.05 oz. in ounces.

GUM KINO, powdered, advanced to \$1.15 lb.

INSECT POWDER is in good demand for forward delivery. We quote strictly pure of the same grade we have handled for many years at .17½c. lb. by keg.

MANNA, small flake, is lower.

MOTH BALLS, and FLAKE NAPHTHALINE.—The demand is developing, and prices favor buyers.

OILS, ESSENTIAL.—Bergamot, Sanderson's, easier at \$2.75 lb. Croton advanced to \$1 @ \$1.10 lb.

HEAVY Cod Liver, Norwegian, the poor catch of fish, and the light stocks of oil abroad have conducted to advance the price materially. The catch is said to be about one-third that of last year, and still higher prices are probable. Lard, extra, declined 55c. during March, and has reacted to 50c.

OPIMUM, for a short period after our last issue excited considerable attention, but during the past fortnight the market has declined, and lower prices are quoted to arrive in bond. Reports concerning the growing crop are conflicting and the uncertainty as to the action of Congress in placing a duty upon it makes the future problematical.

SAFFRON, American, has advanced; the bulk of the stock being concentrated in few hands.

SEED.—Canary, re-cleaned, lower at 3½c. lb. in sacks. Celery, has been bought up by one or two parties, and price advanced to 22 @ 25c. Coriander is higher.

SILVER NITRATE has declined further. Powers & Weightman's in 1 lb. bottle, \$7.15 lb. inclusive.

TURPENTINE advanced to 37½ on the 21st and declined to 35½ on the 30th ultimo.

PARIS GREEN.—Prices will not be announced until April 30.



M., P. & Co., also, under date of April 9, make the following net quotations.

Alcohol 188 per cent. by bbl. (net cash).....	03 gal.
We handle only non-Trust goods.	
Carbolic acid crude, 30 per cent., by bbl. inc.	30 "
inc.	10 gal. can
Carbolic acid crude, 30 per cent., 5 gal. can	30 "
inc.	35 "
Citric acid cryst., 10 lb. box.....	46 1/2 lb.
" " " 25 " lot.....	47 "
" " " 10 " lot.....	48 "

## FLY PAPER.

25 cases.	10 cases.	5 cases.	1 case.	Box.
Thum's 3.35	3.40	3.50	3.60	40
Stecher's, 25 in box, 10 boxes, 4 1/2				45
50 " 10 " 80				90
Champion.....	10	36		40
Granular eff. cit. magnesia, M. P. & Co.'s,				2.50 doz.
4 oz. bots.				2.75 lb.
Opium, prime.....				2.75 lb.
Insect powder, strictly pure, unbleached:				
By keg.....				17 1/2 lb.
50 lb. lot.....				18 lb.
10 " " 20				20 lb.
Silver nitrate, P. & W.'s, 1 lb. bot.....				7.15 lb.
" " " 1/2 " " 7.25 lb.				7.35 lb.
" " " 1/4 " " 7.35 lb.				
Olive oil Restuccia, 2 gal. orig. can inc.....				2.40 gal.
Casor oil No 1 by bbl. inc.....				1.20 gal.
" " " 1/2 " " 1.22 gal.				1.22 gal.
" " " 5 gal. can inc.....				1.28 gal.

## Package Prices.

William H. Raser, drug broker and commission merchant, 32 Platt street, New York, in his circular dated 4th inst., refers to the operations in the drug market as confined to moderate jobbing orders with few fluctuations. Opium is very slow and values have further weakened the past day or two; \$2.60 is still named for single cases on spot, but it is possible that this figure could be shaded to \$2.57 1/2, while for May delivery single cases could be secured at \$2.55 and round lots (say 5 or 10 cases) probably at \$2.50 cash; broken parcels \$2.62 1/2 and probably at \$2.60. Pure powdered opium \$3.45 @ \$3.50 as to quantity. Quinine is equally dull, and while manufacturers are firm at their schedule figures outside lots are offering at a fraction lower, say 22 1/2 @ 23 1/2 c. for foreign bulk, as to brand, quantity, etc., and it is currently reported that a lot of 10,000 ounces mixed brands, some of it pretty old, could be secured at 22c. cash. Cinchonidine: 100 ounce tins in lots of 500 to 1,000 ounces and upward at 2 1/4 c. Balsam Peru is higher at \$1.60 to \$1.65 with up to \$1.70 asked. \*Balsam Tolu is unchanged. Balsam Copaiba easier at 34 to 35c. for prime clear in barrels and cases. Balsam fir, Canada, \$2.45 to \$2.50 and less would probably buy in barrels. Oregon balsam 75 to 80 barrels and less. Norwegian cod liver oil there is less doing in this week, but prices are firm at \$27 @ \$28 with up to \$29 and \$30 asked. Malaga olive oil: yellow 60c. and for 5 barrels 59c. Green oil at 62 to 63. Asafoetida: prices are somewhat easier, though still high. Blue vitriol: there has been an active demand both for export and for home consumption and prices are stiff at 3 1/2 to 3 3/4 c. Muria: ammonia continues very fine at 6 1/4 c. for white grain. Lump sal ammoniac unchanged. Copperas dull and market overstocked. Shellacs firm at last advance, with a fair jobbing demand. Damiana is tending higher again. Licorice root prime select in small bundle at 8c.; in cases about 100 lbs. each. Ipecac a trifle lower. Jalap easier also. Serpentaria seems to be somewhat scarce and up to 38c. is being asked, but there is still stock in the market at 32 @ 35c. as to quantity. Senega root 37 @ 40 as to quantity and quality. Golden seal root 21 @ 22c. as to quantity. Mexican sarsaparilla 9c., and in 10 bale lots at 8 1/4. Saffron, American, has been further

advanced to 48c. in bales and 50c. in broken lots. Celery seed 18 to 19c. Canary seed easier. Dutch caraway lower. Flaxseed a trifle higher. Hempseed dull and unchanged. California mustard seed tending higher. Sugar lead, white prime, I offer in casks at 10 1/2. Chlorate potash easier. Bichromate potash lower. Yellow prussiate potash also lower. Nitrate silver firm and tending higher. Spices rather dull with few changes.

## Essential Oils, etc.

A. D. Blanchet, Jr., importer of essential oils, vanilla beans, olive oil, and fine drugs, 80 Warren street, New York, issues a circular under the date of April 4, giving the following quotations on essential oils and vanilla beans:

Oil lemon, new crop (A. D. B.).....	\$ 1.25
Oil orange, sweet.....	1.35
Oil bergamot.....	2.35
Oil peppermint, best, Wayne County.....	2.40
Oil clovebuds.....	.60
Oil sassafras, pure Southern.....	.34
Oil bay, best.....	3.35
Oil wintergreen, natural.....	1.50
Oil rose, best Kezanlik, original packages, per oz.....	8.00
Oil pennyroyal.....	1.35
Oil cassia, original cans or cases.....	.85
Oil anise, original cans or cases.....	1.50
Oil Copaiba.....	.50
Oil lavender, Mt. Blanc.....	1.00
Oil lavender flowers, extra.....	1.45
Oil neroli bigarade.....	32.00
Oil neroli petalle.....	36.00
Oil almonds, bitter, pure, from \$4.50 to 6.00	
Oil almonds, art.....	1.00
Oil mustard, pure, 1 lb. bottles.....	7.50
Oil mustard, 16 one-ounce bottles (per pound).....	8.50
Oil mustard, art., 1 lb. bottles.....	4.50
Vanilla beans, Mexican (per pound), from \$8.00 to 14.00	
Vanilla beans, Bourbon (per pound), from \$5.00 to 7.00	
Tonka beans, Angostura.....	\$1.75

## Review of the Wholesale Market.

NEW YORK, April 18, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There has been no special activity in the several departments of drugs, dyestuffs and chemicals during the week under review. The volume of jobbing business has been of average proportions, though the aggregate does not show an increase over the corresponding periods of previous years, and no special interest seems to be extended to any special lines. Regarding prices there is a generally steady feeling, and fluctuations are found to be fairly evenly divided between higher and lower values. The more important advances and declines are tabulated as follows:

ADVANCED.	DECLINED.
Nitrate of silver.	Oil lemon (Sanderson's)
Tartaric acid.	Nutgalls.
Benzoic acid.	Gum arabic.
Cascarilla bark.	Cod liver oil (Norwegian).
Balsam Peru.	Cuttle bone.
Mustard seed.	Mexican sarsaparilla.
	Japanese camphor.
	Chlorate of potash.

## DRUGS.

ALCOHOL shows no further change from the reduction noted in our last issue. The net price of the Trust is about \$2.05 for lots of 10 bbls., but this value, it is said, can be shaded from the hands of independent distillers.

BALSAM COPAIBA is finding a moderate consuming outlet at nominally unchanged quotations. Para has been in good demand and sold at 34c.

BALSAM FIR has remained quiet and there seems to be no disposition on the part of holders to urge sales at a concession. Recent sales at \$3.50 @ \$3.70.

BALSAM PERU, owing to scarcity, is offered very sparingly, and at an advance. Small sales at \$1.75 @ \$1.80.

BALSAM TOLU is maintained with a fair show of firmness, but we hear of no sales of consequence and the range of 24 @ 27c. is quoted nominal.

BARKS.—Cascara Sagrada is meeting with about the usual inquiry and prices are nominally unchanged. Cascarilla is held with increased firmness owing to scarcity. We hear of numerous small sales at 7 @ 9c.

BUCHU LEAVES, short, are in demand and we are reported a sale of 1,500 lbs. at 10 @ 12c.

CASSIA BUDS continue firm at the previous range; quoted 18 @ 8 1/2 c.

CASTOREUM has sold down to \$16 recently for a parcel of 25 lbs., but nothing now offers below \$17.50 @ \$18. The small available supply is concentrated in the hands of a few holders. London markets are said to be better supplied.

CACAO BUTTER has been less actively inquired for, but prices are sustained at the full previous range of 32 @ 32 1/2 c.

COD LIVER OIL, Norwegian, continues unsettled, though the indications are toward firmer prices. Round parcels have been sold during the week at \$27, but no more is to be obtained at that figure, and the lowest value now quoted is \$28 while \$29 is generally asked.

CUTTLE BONE, Trieste, has declined to 9 1/2 @ 9 3/4 c., without, however, increasing the demand to any appreciable extent.

DAMIANA LEAVES have been jobbing fairly during the week and we hear of small sales at 12 1/2 c.

ERGOT continues dull and we have nothing of consequence to report. Values are fairly well maintained upon a basis of 23 @ 25c. for German and 27 @ 28c. for Spanish.

HOREHOUND (Marrubium) has been inquired for during the week, and among other transactions we hear of sales of some 40 bales on private terms.

JABORANDI in single bales can be obtained as low as 17c., but an advance upon these figures is asked for larger quantities.

MENTHOL is slightly firmer and holders now refuse to shade \$4.60.

OPIUM continues easy of sale though prices are manifestly weak and holders evince no special urgency to realize by making price concessions of a tempting character. Importers are offering single cases at \$2.35, while for parcels in transit business might be done at \$2.30 or perhaps a shade lower. Buyers are, however, operating with great caution, as an impression prevails that the future course of the market will be in the direction of lower values. The jobbing value is nominally \$2.40 @ \$2.45 and powdered continues to offer at \$3.35 @ \$3.40.

QUININE has met with freer inquiry during the interval, interior buyers giving signs of a disposition to stock up; this taken with an absence of competition from outside sources has strengthened the tone of the market, and 23c. is now the lowest quotation from second hands. Manufacturers are firm at the previous range at 25c. for foreign in large bulk, and 27 1/2 c. for domestic.

SENA LEAVES are improving in demand with full previous prices obtained for two leading varieties. Natural Alexandria quoted 18 @ 25c., and Tinnivelly 5 @ 15c. as to quality.

**TONKA BEANS**, Angostura, are reported in an exceedingly favorable statistical position, and though prices are sustained at the former figure we hear of no important demand either of a speculative or legitimate character. Holders quote at \$1.80 @ \$2.

**VANILLA BEANS** are finding a fair consuming outlet though prices are well sustained at the previous range of \$6.50 @ \$13 for whole and \$5.50 for cut.

#### DYESTUFFS.

**CUTCH** is steady with a moderate jobbing inquiry. Prime quality bales held and selling at 5½ @ 6c.

**GAMBIER** is only moderate in demand, but the market retains a steady appearance with the range of 4½ @ 4¾c. as to quantity and quality.

**NUTGALLS**, which made a fractional advance, have eased off a trifle, and are now offered at 13½ @ 14c., but important inquiry is yet lacking.

**SUMAC** does not meet with increased attention and inquiry is limited. Sicily offers at \$73.50 @ \$77.50, and Virginia at \$43 @ \$47.

#### CHEMICALS.

**ACETIC ACID** of the commercial grade has been freely inquired for, with the current sales at the range of 1¼ @ 2c.

**BICHROMATE OF POTASH** continues unsettled, with 10c. the value generally required.

**BLUE VITRIOL** continues in demand but without variation in price, though an advance on 3¼c. is exacted in some quarters.

**BLEACHING POWDER** continues quiet though no special variation in prices is to be noted. We quote the range 2½ @ 2¾c. for German and English as to quantity.

**BORAX** continues quiet but firm at 8¼ @ 8½c. for refined. For concentrated 7½ @ 7¾c. is asked as to quantity.

**BRIMSTONE**, crude, continues very dull. For the limited stock of seconds upon spot \$17.50 @ \$18 is asked.

**CHLORATE OF POTASH**, though lower, is less freely inquired for and the market retains a dull appearance. We quote crystals at 13¾c. and powdered 14¼c.

**CREAM TARTAR** remains quiet but steady at 17c. for crystals and 17½c. for powdered.

**CHLORAL HYDRATE** is steady and moving out fairly at \$1.25 for bulk crystals and \$1.20 for bulk crusts.

**CITRIC ACID** meets with only limited attention, though supplies are yet offered freely from outside hands at 42c. @ 42½c. for bbls. and kegs. Manufacturers' quotations are ¼c. above these values.

**NITRATE OF SILVER** has advanced in the interval and manufacturers now quote 43 @ 44½c. as to quantity.

**NITRATE OF SODA** is firmly maintained at \$2.20 @ \$2.25 spot with a moderate business reported at this range.

**OXALIC ACID** continues in moderate inquiry with the general asking price 6½c.

**QUICKSILVER** is moving out fairly and the market is steady at 45½ @ 47c. as to quality.

**TARTARIC ACID** has marked a higher value during the week with 22 @ 22½c. quoted for crystals and powdered respectively.

**SAL AMMONIAC** is scarce and firm with 7 @ 7½c. for white grain.

#### ESSENTIAL OILS.

**ANISE** does not vary either in price or demand and we continue to quote the range \$1.42½ @ \$1.45.

**BERGAMOT** is steady and in somewhat better demand; sales at \$1.75 @ \$2.25 as to quantity and quality.

**CASSIA** yet offers 82½ @ 85c., but buyers are not encouraged to anticipate wants to any considerable extent.

**CUBEB** is meeting with about the usual demand, but the market does not vary from \$1.50 @ \$1.70.

**CLOVE** is quoted at 50 @ 53c. though there is little doing at the moment.

**LEMON**, Sanderson's, has been reduced to \$1.35 @ \$1.40 as to quantity.

**PENNYROYAL** remains quiet without, however, any quotable change in price. Prime grades, domestic, held at 90c. @ \$1.

**PEPPERMINT** appears to be in better inquiry, with limited quantities of HGH obtainable at \$2.85, though the bulk of the stock is under close control, and held up to the point of \$3.

**SASSAFRAS** is easy with, however, no quotable change in values.

**WINTERGREEN** is maintained at full previous prices. We quote the range at \$1.40 @ \$1.50 for natural, and 80 @ 87½c. for artificial.

#### GUMS.

**ALOES**, Curacao, are in less abundant supply, and the market is firmer at 2¼ @ 3c.

**ARABIC** of the different grades have declined, and quotations are revised as follows: first picked, 45 @ 48c.; 2d picked, 28 @ 30c.; 3d picked, 20 @ 21c.; 4th at 16 @ 17c.; 5th at 12½ @ 15c., and sorts 9½ @ 10c.

**ASAFETIDA** is inquired for and we hear of numerous sales of prime grades at 22 @ 28c. as to quality.

**CAMPOR**, Japanese, in 2-lb. cakes, offers from some holders at 41c.; domestic held at 42 @ 43c.

**CHICLE** is meeting with about the usual demand. The quotations of the market are steady at 25 @ 28c., though these figures might be shaded in some instances as we hear of sales of small parcels at 24c.

**SHELLAC** continues in moderate consumptive demand and prices are steady upon the basis of 35 @ 36c. for DC, 33 @ 34c. for VSO, and 25 @ 26c. for TM.

**TRAGACANTH** is meeting with a moderate sale at the range of 32 @ 36c. for Aleppo as to quality.

**VARNISH** is quiet but generally steady. Manila is scarce and held at 10 @ 14c. as to quality.

#### ROOTS.

**ALKANET** is maintained at 6¼ @ 7c. with moderate sales.

**GINSENG** does not vary either in price or demand and we continue to quote the range at 3½ @ 4c.

**GINGER**, Jamaica, continues in fair demand with sales at the range of 10½ @ 12c.

**GOLDEN SEAL** appears to be under good control and firm at 21½ @ 22c., though obtainable in some instances at 21c.

**IPECAC** is held at \$1.25 @ \$1.40 as to quality. The demand momentarily is limited.

**JALAP** continues in moderate jobbing inquiry, but prices are somewhat unsettled, outside holders quoting a fraction less than importers who refuse to shade 20 @ 23c.

**SARSAPARILLA**, Mexican, has declined in the interval owing to absence of demand, and importers are quoting 8c. Broken parcels continue to offer at 8½ @ 8¾c.

**SENEGA**, Minnesota, has sold during the week to the extent of 2,000 lbs. for export, the price asked and paid being the equivalent of 40c.

**SNAKE**, Texas, is scarce and firm at 35 @ 36c.

#### SEEDS.

**ANISE**, sifted Italian, is reported sold to the extent of some 9,000 lbs. at 9c.

**CANARY** continues quiet notwithstanding the low range quoted. Holders ask 2½ @ 2¾c.

**CARAWAY**, Dutch, is held at 6½c., though the demand is limited.

**CORIANDER** is in limited supply and the small available stock is held at 67c.; the latter for best grades.

**CELERY** is meeting with a moderate amount of attention at the previous range of 18 @ 19c.

**HEMP**, Russian, is inquired for, but holders decline to shade 2¼c. and this figure is a little above the ideas of buyers.

**MUSTARD**, California, is in improved position, reports to hand indicating unfavorable prospects for the next crop. We quote yellow at 3½ @ 4c. and brown 3½ @ 3¾c.

**POPPY** is held at 5½c., bids made of 5¾c. being declined.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS WANTED.

**POSITION** by a competent druggist; graduate S. C. P. Address at once J. C. Cope, cor. Penn and Zane streets, Wheeling, W. Va.—15.

**SITUATION WANTED** by graduate; four years' experience; registered in Ohio; strictly temperate; 25 years old; best of references. Address "Ph. G.," P. O. box 525, Ada, Ohio.

**WANTED SITUATION** in drug store by clerk with one year's experience; best of reference from present employer. Address, stating salary, "Antipyrine," care of this office.

**WANTED.**—Druggists to know that we furnish competent clerks free of charge; we also locate physicians, buy, sell and exchange drug stocks. For particulars, address with stamp, the "Western Drug Exchange," 440 Sheildley Building, Kansas City, Missouri.

**DRUG CLERK**, 15 years' experience, registered, desires position; city or country; references; first-class. Address "J. T. O.," 806 Columbus avenue, New York.—16

**SITUATION WANTED** by an experienced pharmacist twenty years of age; do not use liquor or tobacco; position in Texas; speaks some Spanish; best of references. Address Box No. 119, Floresville, Texas.

**SITUATION WANTED.**—Young man, graduate P. C. P.; 5 years' good experience; can furnish best references; will go anywhere. Address, with all particulars, "Pharmacist," Box 164, Lebanon, Pa.—16.

**SITUATION WANTED** with a first-class drug company to do detail work, by an experienced man; best of references furnished. "Detail," 315 W. 58th street, New York.—16.

#### BUSINESS OPPORTUNITIES.

**DRUG BUSINESS** for sale at a bargain; proprietor has other business and will sell at sacrifice. Address S. W. Ferguson, Cooperstown, N. Y.—16.

**FOR SALE**, fountain, all complete; A. D. Puffer make; eight svrups; in good order. W. W. Roberts, Boonville, N. Y.—18.

**DRUGGIST WISHES TO RETIRE**; rare chance to buy a paying first-class store, Westchester Co., New York. Address Marah, 87 Hamilton street, East Orange, N. J.—18.

**DRUG STORE** for sale in a prosperous town in the Connellsville coke region; town also has a glass works; population 1,000 and growing; annual business from \$3,000 to \$4,000; rent \$10 per month; stock from \$1,800 to \$2,000; will sell at invoice; also in connection a fine residence, either for sale or rent. Address Lock Box No. 3, Stauffer, Pa.

**STORE WANTED.**—I desire to buy out a good drug business in New York State, in city or town, and will pay from three to five thousand dollars cash; or will rent a vacant store if in good location. Address, giving full particulars, description of store, amount of business, value of stock at market price, value of fixtures, lowest cash price, etc., H. Keeling, Binghamton, N. Y.

**It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.**

Drugs, Chemicals, &c.			Citrate, Potash, per lb.			Naphthalene, flake, per lb.			Seeds, Anise, German lb.		
Acetanilid, bulk, per lb.	.35	0.36%	Soda, per lb.	..	.40	Naphthalene, flake, per lb.	..	.03	Anise, Star, lb.	..	.18
" lbs., per lb.	..	.58	Soda, pow'd, lb.	..	.10	Naphthalene, Ball, per lb.	..	.04	Canary, Smyrna, lb.	..	.07
Ess., per oz.	..	.58%	Cocaine Murate, per oz.	5	95	" "	..	.04	Canary, Sicily, lb.	..	.07
Acetate of lime:			Cocaine bulk, oz.	4-5	4.65	Nitrate Silver, oz.	..	.43%	Caraway, lb.	..	.07
Brown, per 100 lb.	.90	.95	Codine, eights.	4-65	..	Nitrate Soda, 100 lb.	2.10	.15	Cardamom.	..	..
Gray, per lb.	.02%	.02%	Cod Liver Oil, Nor-	..	..	Nux Vomica, lb.	..	.03%	Aleppy, per lb.	..	.65
Acids:			wegian, bbls.	..	27.00	Nutgalla, China, per lb.	..	.13%	Cardamom, Malabar,	..	..
Acetic Com'l, pr lb.	.03%	.03%	Newfoundland.	..	.65	Aleppo, per lb.	..	.14%	per lb.	..	.65
Quafortia, 36 deg.	..	.03%	Colocynth:			Oils, Essential:			Celery, lb.	..	.17
" 40	..	.03%	Trieste, lb.	..	.33	Anise.	1.45	1.45	Colchicum, lb.	..	.13
Benzoic, German.	.51	.53	Spanish.	..	.19	Almonds, Bitter.	4.50	7.50	Coriander, lb.	..	.07
" English.	.09	.09%	Copperas, per 100 lb.	..	.70	" Sweet.	..	.40	Cummin, lb.	..	.11
Boric, Whole.	.15%	.15%	Cr. Tartar, Crystals, lb.	..	.17%	Bay, per lb.	3.50	4.00	Fennel, Germ. lb.	..	.11
" Powdered.	.13	.13%	Powdered, lb.	..	.17%	Bergamot.	1.75	2.25	Flax Meal, per lb.	..	..
Citric, American.	.45%	.43	Cubeb Berries XX, lb.	..	.16	Cajuput, Native.	..	.45	Foenugreek, lb.	..	.05
" English.	.43	..	Ordinary, lb.	..	.14	Camphor.	..	.07	Hemp, Russian, lb.	..	.03%
Carbolic Crystals.	..	..	Cutch, bales, SM, lb.	..	.05%	Cassa.	..	.85	Mustard, yel Cal, lb.	..	.03%
bulk.	.13%	.16	Cutch, boxes lb.	..	.05%	Citrosella, Native.	..	.90	Mustard, brown, Cal.	..	..
lb. bottle.	.19	.21	Cuttle bone, Trieste, lb.	..	.09%	Clove.	..	.50	Poppy, per lb.	..	.03%
Muriatic, 18 deg.	.90	.1-37%	" Jewelers' lb.	..	.35	Copaiba.	..	.70	Quince, German, lb.	..	.25
Nitric, 36 degrees.	.03%	.04%	Dextrine.	..	.04%	Croton.	..	.90	Rape, German, lb.	..	.03%
" 40	.04	.04%	Divi Divi, per ton.	..	.55.00	Cubeb.	1.50	1.70	Rape, English, lb.	..	.03%
Orallic, English.	.07%	.07%	Dragon's B'd, lump, lb.	..	..	Gesaniol.	4.50	7.50	Soap, Castile, Mar,	..	..
" German.	.06%	.06%	In feeds, lb.	..	.75	Lavender.	..	.40	mottled, pure, lb.	..	.06
Picric.	.23	.30	Epoom Salts, per 100 lb.	1.00	1.10	" Garden.	..	.40	White, Conti's, lb.	..	.06%
Salicylic.	1.18	1.22	Ergot:			Lemon, as to brand.	1.30	1.65	Soda Ash, lb., 48% per	..	..
Sulphuric.	..	1.25	G'm'n and Russ'a, lb.	..	.97%	Myrrane.	..	.17	100 lb.	1.00	1.25
Tartaric, Crystals.	..	..	Spanish, lb.	..	.97	Peppermint, bulk.	2.30	2.80	Squills, white, lb.	..	.04%
" Powdered.	.20%	..	Ergotine, Domestic.	..	4.00	" HGH.	2.80	2.85	Sugar Milk, powd., lb.	..	.08
Tannic.	1.05	1.20	German.	4.00	..	Rose.	7.50	9.00	Sugar Lead, white, lb.	..	.11%
Alcohol, Grain, per gal.	2.18	2.25	Flowers:			Sandalwood.	..	..	Lead, brown, lb.	..	.05%
(Less rebate.)			Arnica Flowers, per lb.	..	.11	Sassafras.	..	.36	Sulphate Ammonia, per	..	..
Wood, 95/97.	..	.75	Chamomile.	..	.17	Sassafras, Artificial.	..	.85	100 lb.	2.00	3.00
Alcohol.	..	1.35	German, New, lb.	..	.17	Spearment.	1.60	1.80	De Potash, 48% per	..	..
Aloin, per lb.	1.00	1.10	Roman, New.	..	.20	Tansy.	..	3.00	lb.	1.15	1.15
Atom, Lump, per 100 lb.	..	1.75	Lavender, Ordinary,	..	.14	Wintergreen.	1.40	1.50	Do., Potash, 90% per	..	..
Ground, per 100 lb.	..	1.80	per lb.	..	.04	" Artificial.	..	..	lb.	2.20	2.25
Antifebrine, per oz.	..	.19	Select, per lb.	..	.15	Wormwood.	..	2.25	Sulphur, Roll.	..	.07
Antipyrene, per oz.	1.00	1.40	Gambier, lb.	..	.04%</						

Linsced, raw, gal.....	... 6	.59
boiled, gal.....	... 6	.58
Lard, City Prime, pres-		
ent make, gal.....	... 6	.60
West, prime, gal.....	.68	.64
Cotton-seed, Prime,		
Crude, gal.....	.29	.37
Summer Yellow,		
prime, gal.....	... 6	.33
Summer Yellow, off		
grades....	.31	.31½
Prime White, gal.....	.35	.36
Sperm Crude, gal.....	.63	.65
Natural Spring gal.....	.63	.65
Bleached Spring gal.....	.68	.70
Natural Winter, gal.....	.68	.70
Bleached Winter gal.....	.73	.75
Whale, Natural Win-		
ter, gal.....	.44	...
Bleached Winter, gal.....	.47	...
Ex. B'ch'd, gal.....	.49	...
Menhaden, Crude,		
Sound, gal.....	.39	.33
Dark, pressed, gal.....	.34	.31
Light, pressed, gal.....	.36	.34
Bleached, Winter, gal.....	.41	.40
Extra Bleached, gal.....	.44	..
Tallow, City, prime, gal.....	.59	.58
Cocoonut, Ceylon, lb.....	.05½	.05½
Cochin, lb.....	...	.04½
Cod, Domestic, gal.....	.38	..
Foreign gal.....	.48	.48
Red Klaine, gal.....	.36	.36
Saponified, lb.....	.04½	.06
Bank, gal.....	.35	..
Strait, gal.....	.36	..
Olive oil, table, in tins.....	.80	1.85
Com'n, bbl., gal.....	.58	.65
Rapeseed.....	.60	.65
Neatsfoot, prime, gal.....	.60	.65
Palm, prime Lard, lb.....	.05½	.05½

# American Druggist and Pharmaceutical Record.

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## PUZZLING PRESCRIPTIONS.

PUZZLING prescriptions afford valuable matter for study. We desire to obtain all the puzzling prescriptions that we can, as we propose to publish a series of them in *fac simile*, offering a prize for the reader who deciphers the largest number of these published. To this end we request the co-operation of our readers and would be pleased to have them send us any particularly interesting specimens of puzzling prescriptions which may come under their notice.

## THE LEAGUE GAINING GROUND.

THE hearty, hopeful words from H. M. WHITNEY, on page 283, as to the future of the Interstate Retail Druggists' League are in marked contrast to the report on the next page from Mr. VON HERMANN of Chicago, who interviewed some of the leading proprietary manufacturers concerning the plan of the Universal Trade Association of Detroit.

In commenting on the plan of the latter, the *Western Druggist*, rather prematurely but with characteristic optimism, spoke as though it had received the unanimous indorsement of the trade of Chicago and that its success was assured. The report our correspondent published two weeks ago showed that the scheme of Mr. HAYES was at that time meeting with much favor, but the report of Mr. VON HERMANN caused a decided and very general reaction.

The essential weaknesses of the plan of the Universal Trade Association were pointed out to Mr. HAYES a year ago, but they have never yet been eradicated.

The difference between a close corporation and an open association in an affair of this kind is all in favor of the latter. Proprietors will be very slow to place themselves in any sense in the power of a corporation. They much prefer dealing with a representative and open organization such as the Interstate Retail Druggists' League.

## SCIENTIFIC ORGANIZATION.

ALL scientific work is in the nature of a co-operation, each worker beginning where his predecessor in the field left off and adding his own tiny contribution to the vast mass of knowledge.

It is highly desirable, therefore, that there be scientific organization, as there is nothing that will quite take the place of personal contact as a means of conveying ideas and more particularly of enthusiasms, and without enthusiasm the results of study are apt to be meager.

To young men in particular the personal association with eminent scientists which is rendered possible by organization means a great deal. Their minds are elevated,

their studies given zest and interest, and they are made to feel the possibilities of attainment which lie within their reach.

The meetings of the American Pharmaceutical Association offer a most valuable opportunity of being brought into contact with the leading minds in pharmaceutical science. Every pharmacist who goes to these meetings in an earnest and studious spirit will find himself helped and encouraged.

But it is not alone to the studios that the A. P. A. meetings are of interest, for they offer an opportunity for agreeable social relaxation under the most favorable auspices. The selection of a place of meeting is generally influenced by a desire to have the sojourn there a pleasure aside from any interest attaching to the meeting itself.

If you are not already a member of this Association you should not delay to send your application to CASWELL A. MAYO, 87 College place, or to some other member of the special committee on membership.

## OPPOSE TARIFF CHANGES.

THE Drug Trade Section of the New York Board of Trade and Transportation through its Committee on Legislation have entered a vigorous protest against the proposed changes in the pending tariff bill as affecting alcohol and alcoholic preparations, opium, milk sugar and castor oil.

With regard to alcohol, which it is proposed to tax at the rate of 750 per cent. of the cost of manufacture, it is represented, and wisely too, that the proposed increase "is contrary to sound public policy." The other arguments which the section brings forward against the imposition of a tax differ in no material point from those advanced in the past and which have been fully rehearsed in these columns.

In view of the fact that an increase of inland revenue tax upon alcohol will materially increase the cost of producing chemical preparations in the manufacture of which alcohol is employed, the committee with a desire to protect domestic interests from injury urges that the

Senate increase the import duty upon these articles, of which the more important are: sulphuric ether, spirit of nitrous ether, tannin or tannic acid, and strychnine. On the first it is recommended that the rate of duty should be advanced to 50 cents per lb.; on the second to 40 cents per lb.; the third should have 60 cents per lb. protection, and the fourth 40 cents per oz.

The proposed duty of \$1 per lb. on crude opium is discussed at some length, and weighty reasons against the imposition of any tax whatever upon this indispensable drug are given. The memorial says:

"Previous to placing crude opium upon the free list a large export trade in opium has been built up and New York City has become one of the largest and still growing opium markets in the world, supplying the greater part of the demands of the West Indies, Central and South America, and the continuance of this large trade in opium is wholly dependent upon its being admitted free of duty. If the duty be imposed as proposed the New York market will be unable to compete, this trade will be diverted, the large imports will surely cease and the anticipated revenue based upon present importation will, therefore, not be realized."

Objection is made to the imposition of a specific duty of 5 cents per lb. on milk sugar, as it is shown that at the present market price of the article this equals a duty of 65 per cent. which is entirely unwarranted and uncalled for, and the committee say:

"A rate of 30 per cent. would not be objectionable, but a higher rate than this while absolutely prohibiting importation would be a great temptation to the American manufacturer to combine and form a trust which could advance the price 6 cents a lb. (75 per cent.) over the present market value before foreign goods could be brought here in competition with them. Under a 30 per cent. duty a reasonable limit would be placed upon their exactions."

As to castor oil it is recommended that the duty be not placed lower than 35 cents per gallon, as provided for by original house bill (H. R. 4864), 35 cents per gallon being a very large reduction from the present duty and being a comparatively low rate in view of the duty levied on castor beans.

The members composing the Committee on Legislation of the Drug Trade Section are ALBERT PLAUT of Lehn & Fink; FREDERICK G. MEYER of Meyer Bros. Drug Co.; GEORGE R. HILLIER of R. Hillier's Son Co.; CHRISTOPHER L. WILLISTON of Chas. Pfizer & Co., and ANDREW B. ROGERS, Jr. of Rogers & Pyatt.

## DRUGGISTS' LIQUOR LICENSES IN NEW YORK STATE.

UNDER the law which went into force on February 1 the pharmacists of this State are provided with a special license under which they are permitted to sell on prescription only and are forbidden to take out any other form of license than this prescription license. Under the old law druggists were also permitted to take out a storekeeper's license costing fifty dollars per annum and given permission

to sell liquors in quantities of less than five gallons. The excise boards of Flushing, Long Island, it seems, endeavored to force every druggist doing business in their jurisdiction to take out both kinds of licenses. This the druggists with a few exceptions refused to do. When the present law went into effect expressly prohibiting druggists from holding any save a prescription license the excise board seems to have disregarded it, still refusing to issue a prescription license unless a storekeeper's license was also taken out.

In Long Island City, too, the excise board is giving the druggists trouble in the matter, though the trouble there takes a somewhat different phase, as notice has been served on all the druggists that they must take out the prescription license whether they dispense liquors or not.

On inquiry we find that in Buffalo the druggists who decline to dispense prescriptions for liquors are not required to take out State licenses and do not do so. Those who wish to dispense liquors on prescription take out a twenty-dollar license, and those who wish to sell at retail take out a storekeeper's fifty-dollar license, but not a prescription license, as the fifty-dollar license gives all the privileges conferred by a twenty-dollar license and more too. The same condition of things is reported from other sections of the State.

Aside from the usage of the excise boards in the different sections of the State (they all act under the same law) a consideration of the matter from a legal standpoint would indicate that the excise board of Long Island City transcends its rights when it says that druggists must take out a license.

They could not legally punish any one for refusing to take out a license, but could only punish transgressors actually detected in the sale of liquors contrary to the law. It is true that in some States it has been held that the finding of liquor on the premises constitutes *prima facie* evidence of intent to sell, and the pharmacist who does not intend to take out a license and who does not propose to sell liquors either with or without a prescription should be careful not to have any liquors on the premises.

Up to the present time the right of the pharmacist to sell alcoholic tinctures, etc., without regard to the excise restrictions has, we believe, never been called into question. In fact a member of one of the excise boards of the State some time since asked a druggist friend of his why he took out a license at all as it was not necessary.

Here is a case where a strong, concerted movement on the part of the druggists might free them from the burden of a tax which really has no justification. In the opinion of many astute lawyers the exaction of any license fee at all from the

pharmacist for the sale of liquors for medicinal purposes, whether on prescription or not, is unconstitutional.

In the State of Kentucky it was held by Judge LEWIS in the case of *SABRIS vs. the Commonwealth*, that "If the legislature has the power at all to prohibit the sale of intoxicating liquors by retail, it exists alone because the health, peace and order of society require it; and upon that ground alone this court, without dissent, has heretofore decided it may be exercised; but there being no reason therefor the power of the legislature to prohibit the prescription and sale of liquors to be used as a medicine does not exist, and its exercise would be as purely arbitrary as the prohibition of their sale and use for religious purposes."

We concede the right of the State to regulate or to entirely prohibit the sale of liquors as beverages, for their sale and consumption as beverages, is fraught with danger to the body politic, but this does not apply to their sale as a medicine. The punishment for the abuse of the privilege thus secured to the pharmacist should be very heavy so as to prevent the unscrupulous from using a respectable calling as a cloak for the illegitimate and promiscuous sale of liquor as a beverage.

In the case of the Commonwealth of Kentucky vs. FOWLER the Hon. J. PROCTOR KNOTT argued as follows:

The simple question is, if a man has a natural right to vend spirituous liquors in good faith for medicinal purposes, and if he can only be deprived of that right by an exercise of mere arbitrary power which our Bill of Rights declares, and this court has affirmed, can exist nowhere in a republic, whence comes the authority to place his enjoyment of that right under the surveillance of an overseer, albeit his appointed guardian in that matter may be the most learned and skillful doctor since the days of Galen or Hippocrates? What ecumenical council has declared the average doctor infallible? What principle of constitutional law can justify his arbitrary supervision of the conduct of his neighbor in the exercise of any of his natural rights as a freeman? *Quis custodiet ipsos custodes?* If the doctor must watch the druggist who shall supervise the doctor?

I forbear to discuss this point further. After all, the only question that can arise in any case of sale of spirituous liquors by a druggist is, whether the article was sold in good faith as a medicine, and that question may arise license or no license, prescription or no prescription. In no case could a prescription be more than *prima facie* evidence of that good faith. If it could be shown *aliunde* that the liquor was actually sold to be used as a beverage the party selling it would be guilty of a misdemeanor, notwithstanding he might have procured a license under this section and be armed with a prescription from the ablest doctor in the country.

In this statute-ridden State the constitution and the constitutional and inalienable rights of the citizen seem to be generally entirely lost sight of, but we think it highly probable that if the pharmacists of the State would, either through the State Association or the League bring a test case to trial on the grounds here laid down the right of the pharmacist to sell liquors for medicinal purposes independently of legislative interference would be established.



Written for the  
American Druggist and Pharmaceutical Record.

## PRACTICAL MALTING.

BY A. HART REMINGTON,  
Philadelphia, Pa.

Inasmuch as the use of extract of malt for dietetic and medicinal purposes is largely on the increase, it may prove interesting to the readers of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD to peruse the following account of the process of malting, as now carried on under the recent improvements. With this object in view, a visit was made to the Francis Perot's Sons Malting Co., the oldest malt house in America. The original building was situated on Front street, Philadelphia, and it was built in 1687, three years after the landing of William Penn in Pennsylvania. As the demands of the business became larger, it was necessary to move to more commodious quarters and the foundation of the oldest portion of the present building, at 310 Vine street, was laid in 1780. Continual additions from the neighboring properties have enlarged the works very greatly.

Malt, as is well known, is barley altered by a slow growth, which converts the starch in the grain into maltose or malt sugar. This is effected by the presence of diastase, whose agency in the conversion of starch to sugar has been clearly proved. It frequently happens that a grain of barley is found which does not grow, although it has gone through the entire process of malting. This grain, if analyzed, will be found to contain all elements of a normal grain of barley without the diastase. In the growth of the barley and in the gradual conversion of starch to maltose, a spear and a small rootlet (the plumule and radicle) appear after this stage of development. It is very necessary that growth be stopped; for if it were allowed to continue, the maltose would be decomposed and the product soured and rendered useless. Therefore, an aid to every fermentative process is invoked, namely—moderate heat. Consequently on the eighth or ninth day the malt is placed in the kilns.

To the casual observer, the finished malt does not differ much from the raw barley, but a close examination will reveal the effects of the changes which have taken place. The barley before malting is very hard and has a starchy taste; after kiln-drying, it is sweet and soft, and the presence of the malt sugar or maltose is apparent.

The barley having been received at the malthouse, duly inspected, and passed, is put in to "steep." In this process the grain is thrown into large tubs of water in which it absorbs about half of its weight of water. This is done in order to give the seeds the necessary moisture to induce germination. At the expiration of three days it is taken out and laid about six inches deep on cement floors. Twice every day the soaked barley is turned over by one of the malsters, who wields a large wooden shovel in a very rapid and peculiar manner, throwing the grain which was underneath on the surface; the object being to prevent the undue heating of the grain, for it is found that the lower layers of the steeped grain rapidly increase in temperature, while the grain on the surface, being exposed to the air, does not become heated to the same extent. If the grain was not frequently turned, the process of converting the barley into malt would not be uniform; as the lower and more highly heated layers

would advance in the process much more rapidly than those on the surface.

The best temperature for malting is between 50° and 55° Fahr. If below 40° Fahr. germination is not promoted, or it is very slow; if above 60° Fahr., it is too rapid and imperfections arise in the process through hasty malting. It is, however, easier to overcome a deficiency of temperature than an excess; the rooms could be heated in winter but could not be so easily cooled in summer. For this reason, the malting season is limited from October to May. At the end of the eighth or ninth day, the malt, as it can now be called, goes through the process of kiln-drying. Kiln-drying has of late years been greatly improved; the old method required all the grain to be in one receptacle with the heat permeating through from the bottom. This consumed a large amount of fuel and it was very expensive. The improved method is as follows:

The furnace is built below, usually in the cellar, and reaching above it is a large chamber with three stories; each floor of the story is made of perforated sheet iron. The gases and heat from the hard coal burned in the furnace, of course, pass through these chambers. On the top-most floor in the flue, furthest from the furnace, is deposited the first lot of malt, which is let down on the second day by means of trap doors, into the next floor, the space previously vacated being filled up with new malt. This goes on, on each successive day, the malt moving down one story. In these kilns, the malt can be made dark, light, or medium brown.

The demand now is mostly for pale ale and beer, and the malt, which has only been slightly browned, is used for the manufacture of this beer and ale. The gases from the coal which pass through the malt have been found to be beneficial rather than hurtful to it.

The new method of malting, which is very successfully carried on by the same firm at Oswego, is improved and interesting. A large supply of water from an artesian well was developed near the malt-house; the water, due to the fact of its coming from a great depth, is very cold and it does not vary one degree, either in summer or in winter. Air is forced into a chamber, through which this cold water is sprayed, with the result of decreasing the temperature to the desired degree; the air is then conducted through flues under a perforated sheet iron floor, on which is laid the steeped grain, which always has the cold currents of air (forced by Sturtevant blowers) permeating through it. This process controls the temperature, prolongs the season for malting, and obviates the necessity of so much attention, prevents mold, and also renders the germination more uniform.

The malt thus prepared is generally sold to brewers and to manufacturers of malt extracts on contracts, as on account of the limitations of the season of manufacture, it is necessary to provide for a supply for a long time ahead.

Burns in children are treated by Wertheimer (*Archiv. f. Derm.*) as follows: Wash with warm boric acid solution, cover with absorbent gauze saturated with equal parts of lime water and linseed oil and  $\frac{1}{4}$  to 1 per cent. of thymol, cover with absorbent cotton and renew every day. At the end of fourteen days apply on strips of absorbent gauze the following: Bismuth subnitrate, 9 parts; boric acid, 4.5 parts; lanolin, 70 parts, and olive oil, 20 parts.

Written for the  
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## PERTINENT SUGGESTIONS.

BY THE JUNIOR CLERK.

The metric system of weights and measures having been adopted by the Committee of Revision as the official standard, we may look for its more common use among pharmacists and physicians. If the system *should* come into general use cubic centimeter glasses and gramme weights will become a part of the necessary shop furniture, and in a short time the mere handling and reading will be much easier, as everything is easier understood by practical use than by theoretical explanation. One thing, however, will trouble many, the older fellows more than the younger, and that will be to learn to *think* in the new system. To illustrate: If we have a prescription calling for a 4-ounce mixture containing 1 grain of strychnia to be given in teaspoonful doses we know at once because we are familiar with the subject, and used to thinking that way, that the dose ordered is  $\frac{1}{4}$  of a grain and that the prescription is a proper one to prepare.

If, however, we receive a prescription for (125 cc.) a one hundred and twenty-five cubic centimeter mixture, calling for sixty-five milligrammes (.065) of strychnine to be given in teaspoonful doses, any college of pharmacy boy *should* be able to go ahead with perfect confidence.

But the chances are that the "old man" would shy into the back room with such a prescription and do some hasty book-worming after a comparative table of the two systems to satisfy himself that two and two really do make four.

He *knows*  $\frac{1}{4}$  of a grain of strychnine to be all right. But he finds it very difficult to ascertain, even by reference to the tables, that one drachm of the last mentioned mixture contains, practically, two milligrammes (.002) of strychnia.

We must learn to *dismiss* the old system from our minds while working with the new, and we need, while learning to do that, a simple and easily understood way of readily comparing one system with the other. We have, already, carefully prepared exhaustive tables of comparison. But we need a simple, direct way of proving, for instance, that 22 milligrammes (.022) is one-third of a grain or that 82 cubic centimeters are about one ounce, and *vice versa*. A simple question but difficult to answer simply.

A *practical* method of clearing a syrup or an elixir which from any cause has become turbid is still a desideratum. When I say practical I not only mean as to the *method* but as to such quantities as are commonly made by the retail pharmacist, and as I include elixirs any process calling for the application of heat is not to be considered. I think an article showing the importance of being more particular, *much* more particular in preparing ointments, both those which are official and those which are ordered extemporaneously by the physician would be welcomed. As, for instance, cottonseed oil is indiscriminately used as a substitute for olive oil. Alboline frequently serves for unguentum aqua rosea in compound ointments, and almost anything answers for unguentum or ceratum.

Read the "trade notes" and the market review every week if you want to keep posted.

## Pharmaceutical Progress.

**Ammonia free distilled water** may be obtained, says Bisbec (*Chem. News*), by adding phosphoric acid before distillation. When this is done even the first drops coming over are free from ammonia.

**Argentamin** is a preparation of silver phosphate in water with ethylenediamine. It is said to be antiseptic and useful in gonorrhoea. It does not precipitate albumin.—See page 187 of this journal.

**Cocaine Jelly.**—A compound known as cocaine jelly, containing 4 per cent. cocaine, is used by English obstetricians. The vagina and os are well anointed with it and the result is a great reduction in the pains of labor.

**Stable Boric Acid Solution.**—It is proposed to prepare a solution of boric acid in glycerin by digesting them at a temperature of 48°. In this manner a gelatinous cream is obtained readily soluble in water and suitable for use in medicine.

The lighting power of yellow flame is greater than that of pure white flame (*Industrie Blätter*), as is shown by photometric observation, though when looking directly at the light the white one appears to be the brighter of the two.

**A Reducing Substance in the Urine of Enuresis.**—F. Rohde almost always found in the urine of children suffering from enuresis a reducing substance which is not sugar and which he takes to be lactic acid. The same was also noted in the urine of adults who complained of excessive micturition.—*Berlin Klin. Woch.*

**Tannate of Strophanthine.**—Merck (*Jahrbuch*) says this body is a yellowish amorphous powder, soluble in alcohol, containing 58.14 per cent. of strophanthine. It is indicated in the same cases as the pure glucoside, and is convenient for use in the form of pills.

**"Bar," a New Metric Weight.**—The German government proposes the introduction of the word "bar" (from the Greek *βαρος* signifying the last, heavy, large quantity.) It is now under discussion whether the term should be applied to 100 kilogrammes or 1,000.

**Copper in alcohol or brandy** may be detected, says E. Deltour (*Bull. de Soc. de Pharm. de Brux.*, 1894, p. 16), as follows: Evaporate about 55 cc. of the fluid in a porcelain capsule to a residue of 8 or 4 cc. To this add a little insoluble oleic acid. In the presence of copper a beautiful green color is developed at once.

**Microchemical Test for Iodine.**—Denigès (*Jour. Pharm. Chem.*) makes the solution to be tested slightly alkaline with potassium hydrate, then adds a drop of acetone and a little Javelle water. Traces of iodine are in this manner readily detected by the separation of crystals of iodoform. Iodates should be previously treated with a little sodium thiosulphate.—*Pharm. Centralh.*, 1894, 169.

**Tolu for making Creosote Pills.**—A. Stern proposes the following method of making creosote pills (*Pharm. Post*, xxvii, 122). Melt 60 gm. of tolu by a gentle heat, add 25 gm. creosote, mix well and pour out on a marble plate to cool. Keep well covered up. For dispensing powder 60 gm. of tolu, add whatever else is ordered, mix this with the above mass and add 25 gm. creosote. The mass may be rolled out without any addition. The pills should be coated.

**Diphtheria Antitoxin.**—Under the name of diphtheria antitoxin solution Scherlin has placed on the market a solution which it is claimed (*Phar. Zeit.*, xxxix, 214) confers immunity when given in doses of 1 cc. and is even curative in its action. The antitoxin in solid form, which is made after a patented process, is 400 times stronger and is especially designed to be used in treatment of the disease.

**New Reagent for Glucose.**—Bizzari (*Gazz. del Farm.*) uses small pieces of a clean and white wool previously dipped into a ten per cent. aqueous solution of stannous chloride and dried at a moderate heat. If wool, mordanted in this manner, is brought into contact with diabetic urine and carefully dried it will be colored dark on account of the reduction of the tin salt. If one prepares a number of solutions of glucose of varying strengths and places in them pieces of wool treated as above one may be able to make even a quantitative estimation of glucose.—*Pharm. Centralh.*, 1894, 164.

**Value of Vitali's Reaction with Strychnine.**—G. P. Menegaggi (*Boll. Chim. Farm.*, 1894, No. 4) has found that strychnine alone in solutions containing 0.0001 gm. of the alkaloid gives to Vitali's test a slight violet coloration. This is only perceptible when a 4 per cent. freshly prepared and colorless alcoholic solution of potassa is used.

In judicial testimony physiological experiments are not admissible, and Vitali's atropine reaction within certain limits and in the presence of strychnine suffers a disturbance. For pharmaceutical purposes, however, it hardly loses its value, as it is hardly probable that the color reaction of atropine is likely to be confounded with strychnine.

**Animal Charcoal as a Pill excipient.**—M. E. Violé, a Bordeaux pharmacist, seems to have great faith in animal charcoal as an excipient for creosote, croton oil, and the like. He says the charcoal acts as a wonderful absorbent, and it is easy to mass the powder then with turpentine (i.e., the oleo-resin). Thus in the case of creosote he takes  $\frac{1}{2}$  drachm of the charcoal and 15 minims of creosote, rubs them together, and if the creosote is not entirely absorbed adds about 8 grains more of charcoal, then forms a plastic mass with 4 or 5 grains of common Venice turpentine. For croton oil the latter excipient is unnecessary; simply mass the oil with the charcoal. When such drugs as iodoform and tannin are prescribed along with creosote first absorb the latter with charcoal, add the rest, and mass with Venice turpentine.

**Preparation of Mercury Pills.**—Dr. Quingnaud publishes (*Pharm. Post*, xxvi, p. 621) a new practical method of preparing mercury pills as follows: 80 grammes (1 oz.) of medicinal soap are dissolved in distilled water, precipitated several times with salt water, well washed out, and finally redissolved in an abundance of distilled water. To this is poured a dilute solution of 18.5 grammes ( $8\frac{3}{4}$  dra.) of mercuric chloride, and the resulting oleate washed by malaxation. After kneading with powdered licorice-root, one hundred pills are made from the mass, each of which will contain 15 centigrammes ( $2\frac{1}{4}$  grn.) of mercury oleate or 4 centigrammes ( $\frac{1}{2}$  grn.) of metallic mercury. The pills are finally coated with molten salol. When thus prepared mercurial pills, it is claimed, do not disturb digestion in the least, and are very efficient against all syphilitic symptoms.

**Arsenic Hypodermically.**—Popoff advocates the injection of arsenic subcutaneously in cases where the stomach will not tolerate the drug. He uses a new alcoholic Fowler's solution carefully sterilized and administered aseptically in doses of 8 to 9 drops.

The stilling of waves by oil is best effected by those oils which are richest in free oleic acid, says Richter, (*Pharm. Centralh.*, 1894, 204), who has made extensive investigations as to this phenomenon. He finds that the addition of 1 per cent. of free oleic acid imparts this power to petroleum oil while olive oil deprived of its free acid is not any more effective than petroleum oil itself. He further observed that one drop of oleic acid when dropped on the surface of water spread out instantly and with such force as to drive to the edge of the receptacle light particles, such as seed floating on the surface of the water. In fact he observed that the force exerted by this spreading of a single drop of oleic acid was sufficient to move a board weighing five pounds. This is a wonderful power to be exerted by an amount of oil weighing from four to six one hundredths of a gramme and when spread out on the water from two to four millionths of a millimeter thick.

**Salicylic Acid in Bandages.**—Barthe estimates the salicylic acid in bandages as follows: 4 gms. of the material are treated with 100 gms. of distilled water, to which some alcohol has been added, at a temperature of 50° C. for one hour. The liquid is then filtered through a funnel and the materials washed 5 or 6 times with warm water until the filtrate gives but a slight violet coloration with ferric chloride. It is then titrated with  $\frac{N}{10}$  alkali, using phenolphthalein as an indicator. An easier and quicker method is to take 6 gms. of the material and warm between 40-45° C. with 270 cc. water and with 80 cc. of  $\frac{N}{10}$  alkali. Of this solution 200 cc. are filtered off; 20 cc. are treated with  $\frac{N}{10}$  hydrochloric with phenolphthalein as before. By multiplying the amount of  $\frac{N}{10}$  alkali required by 0.0188 and multiplying this result by 25 the per cent. of salicylic acid in the material is obtained.—*Apoth. Zeit.*, 1894, 170.

**Calcium Carbide.**—H. Mossian has prepared a crystalline compound of carbon and calcium,  $C_2Ca$ , by employing the great heat of his electric furnace, the temperature in which may approach 8500° C. The crystals obtained are described as reddish-brown, opaque, and shining. Their density, taken in benzene at a temperature of 18°, is 2.22, and they appear to be totally insoluble. Hydrogen has no action upon the new compound, but the latter becomes incandescent in dry chlorine at a temperature of 245°, calcium chloride and carbon resulting. Bromine reacts with the carbide at 850°, and iodine vapor decomposes it at 805°. In oxygen it is decomposed, with formation of calcium carbonate, and in sulphur vapor at 500°, sulphides of calcium and carbon being formed. Nitrogen has no effect; phosphorus vapor converts the carbide into phosphide, without incandescence; arsenic in vapor reacts with the disengagement of much heat, and also combines with the calcium. Iron and antimony are the only two metals found to react with the calcium carbide. The most curious reaction, however, in which the new compound takes part is that which occurs when water is added to it. Pure acetylene is given off directly contact takes place, and the gas continues to be evolved

until all the carbide is decomposed, thus  
 $C_2Ca + H_2O = C_2H_2 + CaO$ .

When aqueous vapor acts upon the carbide at a dull red heat, the decomposition takes place less energetically, and hydrogen is produced in addition to acetylene. Acids act upon the carbide chiefly when diluted, though fuming sulphuric acid decomposes it and develops a marked aldehydic odor, and chromic acid reacts with formation of carbon dioxide. Various metallic salts also cause decomposition, and when the compound itself is heated in a sealed tube with absolute alcohol to  $180^\circ$ , acetylene and calcium ethylate are formed as follows:

$2(C_2H_2.OH) + C_2Ca = C_2H_4 + (C_2H_5O)Ca$ .  
 A fine class experiment, demonstrating the violence of the reaction between acetylene and chlorine, is readily performed by allowing some fragments of calcium carbide to fall into a vessel containing cold water saturated with chlorine, the reaction being immediate (*Comp. rend.*, cxviii., 501.)

### Treatment of Neuralgia.

In all forms of neuralgia, the hypodermic injection of morphia in  $\frac{1}{4}$  or  $\frac{1}{2}$  grain doses in the course of the nerve often produces wonderful effects, or  $\frac{1}{2}$  grain to a grain of cocaine may be injected locally, says Jas. Woods (*Brit. Med. Journ.*).

Chloroform, belladonna, menthol, and opium, locally applied, are also valuable. The general condition of the patient should always be attended to, and the treatment directed to its improvement.

Good food, fresh air, tonics, such as cod liver oil, or other fat, iron, quinine, in large doses for adults (from 5 to 8 grains), nuxvomica, are always necessary. Among the remedies which are especially directed against the local disease are: arsenic in full doses (5, 7 or 10 minims of the liquor), or small doses gradually increased; amm. chlor. in doses of 15, 20 or 25 grains, 2 times a day. Some writers prefer small doses (5 to 10 grains) repeated every half hour of amm. chlor., as large doses at long intervals do no good and only make the patient sick. Potassium bromide in full doses, butyl-chloral-hydrate in 5 to 10 grain doses; tincture of aconite in 2 to 5 drop doses, and sulphate of quinine are also very popular remedies. Canabis Indica, ether, valerian, turpentine and nitroglycerin are sometimes useful; and a small dose of brandy or wine will often give much relief. Counter-irritation may be applied by mustard or blisters. Electricity is sometimes of benefit.

### Sterilizing Drinking Water.

Frank Watts, F. I. C., analyst to the Government of the Leeward Islands, communicates the interesting observation to the *Chemical News* that the addition of ferric chloride to hard water containing micro-organisms has the result of precipitating the organisms along with the ferric hydroxide. At all events the supernatant water is found to be sterile. In the case of a soft water—i.e., one in which no precipitate is produced on the addition of ferric chloride—after the ferric chloride is added, a small quantity of lime water or of dilute solution of carbonate of soda is thrown in, and this causes a precipitate to form. It is found that vigorous stirring promotes the granulation and subsidence of the precipitate. The precipitate is allowed to subside, and the clear water is drawn off for use. It is found that 1 to  $1\frac{1}{4}$  fl. oz. of

strong solution of perchloride of iron (B. P. strength) are sufficient to purify 100 gallons of water. For domestic use it is advisable to dilute the solution considerably—say ten times—and to use a teaspoonful of the diluted solution for each gallon of water. If a sufficient quantity of water for one day's use be treated at night a supply of pure water will then be ready for use every morning.

### Experiments in Freezing Alcohol.

The success attending Prof. Dewar's experiments in the freezing of absolute alcohol has a peculiar interest, in view of the fact that  $200^\circ$  C. was the utmost limit of cold reached or obtained by man, viz., by the use of liquid oxygen. Prof. Dewar allowed some liquid ethylene to flow through a brass tube surrounded by solid carbonic acid and ether, and, when this cooled, it was passed into a large test tube, in the middle of which was placed a glass tube, with a flattened bulb at the end, the bulb being full of absolute alcohol. The evaporation of the ethylene was then accelerated by the use of the air pump, and the alcohol was frozen into a mass as clear and transparent as crystal. The tube containing it was turned bottom upward, and as it melted it assumed exactly the consistence of glycerin, flowing in a sluggish way down the sides of the tube. Ether requires less cold than alcohol to freeze it, and in several of Prof. Dewar's experiments ether ice formed on the sides of the glass vessels. Besides this, the warm air of the theater was constantly condensing as snow or hoar frost on some of the vessels used in the experiments, and the chief difficulty of the occasion was the projecting of the experiments on the screen by the electric light so that all present might see what was taking place.

### Mineral Waters, Natural and Artificial.\*

We have on more than one occasion drawn comparisons between the natural mineral waters and those that are made in the manufactories of merry England; and, while as it were, we spoke without our book—or, at any rate, without actual chemical analysis—we ventured opinions upon that fairly good test, a clean palate. We remember comparing one much-vaunted natural supply to a glass of water in which a dirty quill pen had been soaked; and others we have noted with anything but the freshness of our own potass, or lithia, or seltzer, or soda. But as it is distinctly fashionable to eat and to drink that which is not English, and that which is not always fresh—old cheese, ancient game, and the like—it appears to be equally *distingué* to drink of the questionables so long as they come from abroad with good strong currents of puff behind them. The sparkling, bubbling, natural streams have been bottled off and sent to the tables of the wealthy; and the debilitated have fancied themselves strengthened and other maladies healed as a consequence. But the bubble has absolutely burst. We have the authority of a no less eminent chemist than Professor Vivian B. Lewes for saying that some of these foreign goods are positively nasty, not to say dangerous. Rain water passing through the earth and through decayed vegetable and animal matter becomes impregnated with gases, and collects in such quantities as to form a natural spring which eventually bursts

forth in the sparkling, bubbling state. The generation of the gas does not strike us as particularly inviting; but everybody to their tastes, of course. On the other hand, when we come to our artificial supply of mineral waters, we know what we are drinking. We have—especially from the large firms—the purest of pure waters; not only distilled, but subjected to more drastic treatment with the object of dissolving anything organic that may be harmful, while the gases are of such an irreproachable character that we may take a bottle of aerated water with more confidence than anything else upon our table.

It is a well-worn axiom that doctors differ; and there are no doubt two sides to this particular question of how natural mineral waters come about. But as we have before said, give us the pure home-made article, and leave the remainder for those who like them.

### Abstracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.\*

#### BLEACHING SHELLAC.

Stir one kilogramme of chlorinated lime in 40 liters of water put in a hard wood vessel, add 5 kilos of pale shellac previously pounded in a mortar and passed through a coarse sieve. After 24 hours add a mixture of 5 gr. of concentrated sulphuric acid in 5 liters of water followed by 30 liters of boiling water. Now remove the light colored shellac which floats on the surface, knead it in warm water and then draw out into the usual slender rod-like forms.

#### BRONZE PAINTS.

The bronze colors as furnished in the pharmacy serve for temporary purposes; that is they are expected, in addition to drying rapidly, to be fairly permanent but not so much importance is laid upon their resisting moisture and atmospheric influences.

Where these latter qualities are desired a copal shellac varnish is the best; though the use of any such varnish is objectionable because the fatty or resinous acids either already present or liable to develop have a chemical action on the copper of the bronze and are apt to cause it to turn it green or to deaden the luster of the bronze.

The commercial liquid bronzes consist for the most part of solutions of resins in turpentine oil and should be rejected on the grounds above indicated. Another variety is made of a mixture of gum dammar, rubber and benzene and this does not present the objectionable features above noted in so marked a degree, but has the disadvantage that owing to the very rapid evaporation of the benzene it is difficult to work with.

The following formulas avoid these objections. The liquid bronze is particularly useful for applying to wicker work, plaster figures, frames, leather, etc. With bronze powder a no previous coating with varnish is necessary. The bronze paints are used most in the gold, silver and copper colors.

#### LIQUID BRONZE.

	Parts.
Bronze powder.....	55
Borax shellac solution.....	25
Alcohol, 90 per cent.....	10

Rub the powder adding the liquid very slowly; put in bottles holding about one

\*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

\* Mineral Water Trade Recorder.

ounce with not too narrow mouths and label with the following directions:

Shake before using until the contents are thoroughly mixed. Then apply with a camel's hair pencil, shaking again each time before dipping the pencil in.

#### WEATHER-PROOF BRONZING POWDER.

	Parts.
Bronze powder.....	65.0
Dextrin.....	40.0
Potassium bichromate.....	0.1

Powder the bichromate very fine and mix thoroughly with the other powders.

#### BRONZING POWDER, NOT WEATHER PROOF.

	Parts.
Bronze powder.....	75
Dextrin.....	25

Dispense in paper parcels of about 150 grains each with the following directions:

Mix the contents of this package with two tea spoonfuls of water, set aside until no lumps are left, and then apply with a camel's hair brush.

#### MASS FOR PRINTERS' ROLLERS.

	Parts.
Cabinet makers' glue .....	500
Water.....	2,000
Refined glycerin.....	500

Soak the glue in the water, and when the glue is well swollen pour off the superfluous water, add the glycerin, put on a water bath, and stir slowly until the whole has evaporated down to 1,000 parts. Then pour into molds.

#### CARBOL-CAMPHOR.

	Parts.
Crystallized carbolic acid.....	100
Campbor.....	200

Rub together and allow to stand in a covered vessel until a reddish oily liquid is formed.

### Gold For Ceramic Work.

The manufacture of what is known as "bright" gold for the decoration of porcelains has been more or less of a secret process, says H. Börnträger (*Deutsch Chem. Zeit.*).

Pure gold is unsuitable, as, if exposed unprotected in the firing oven, it is volatilized. It is consequently necessary to add to the gold some metal which possesses the property of "fixing" the gold on the porcelain, and those most often used for this purpose are bismuth and chromium. The first has long been known in this connection, and appears in nearly all the many useless formulas which are so abundant. The second, chromium, is really very valuable, and its use constitutes the much-talked-of "secret" of the manufacturers.

The gold chloride is prepared in the so-called sulphur balsams composed of sulphur, Venetian turpentine, oil of turpentine and oil of lavender as is laid down in the technical books generally. The item of special interest is the introduction of the chromium. This may be accomplished in two different ways:

(1) Dissolve chemically pure metallic chromium in nitro-hydrochloric acid, and add the chromium chloride thus formed to the gold chloride solution.

(2) The second and, according to my experience, the best method is to use the so-called chromium soap. Prepare a liquid, absolutely neutral soap by mixing the following:

Potassa.....	18 grammes
Olive oil (green).....	100 grammes
Alcohol.....	26 grammes
Water.....	330 grammes

First mix the potassa with 80 grammes of water, then add the oil and alcohol, and finally the remainder of the water, and filter through paper.

With this liquid precipitate a solution of pure chrome alum in hot distilled water, filter through linen, and wash the precipitate

about twelve times with boiling water until the wash water ceases to be colored yellow. The neutral soap is thus converted into a basic and the free oleic acid removed by the hot water.

Dry out the precipitate at about 100° C. (not higher), and the result is a basic chromium oleate of the formula  $(C_{18}H_{33}O_2)_2Cr$ , and contains about 40 per cent. of chromium.

The most important property of this, aside from its high percentage of chromium, is its solubility in sulphur balsam.

To obtain good results add 10 gr. of this chromic oleate dissolved in sulphur balsam to each kilo of the "bright gold" prepared with bismuth. This is the whole "secret."

### Creosote or Creasote.\*

BY CHARLES RICE.

Some eighteen months ago the writer was requested by a correspondent, who desired the information for lexicographical purposes, to give an opinion regarding the preferable spelling of the word "creosote" (or "creasote"). It was then found that the form "creosote" was, for several reasons, the best authenticated, and this was also proposed for and adopted in the U. S. P. Quite recently the writer was requested by another correspondent to produce the reasons why the spelling was altered in the U. S. P., and after he had supplied the information it was suggested to him that this might be of interest to others. Although the matter is not of much importance, yet in compliance with the suggestion, the following note is published.

It was Reichenbach who discovered the substance in 1832,† and who coined for it the name "kreosot." For this reason alone, therefore, the spelling with "o" should be retained. But as some subsequent writers and authorities thought fit to change the spelling in English to "creasote," it is worth while to inquire whether this is in accordance with the best usage in Greek.

In vol. 67 (1833) of the before mentioned journal Reichenbach himself states why he gave the substance that name: "Hier ist es wo ich nun einmal Gelegenheit zu einem Versuche finde, das Wort Kreosot, welches ich für den neuen Körper vorschlage, zu rechtfertigen. Ich heite als nämlich von seiner Eigenschaft ab das Fleisch zu erhalten, als einer seiner auffallendsten, eigenthümlichsten, und von uralten Zeiten her bekannten und erproben. Κρέας heisst im Griechischen Fleisch, im Gen. κρέατος, auch κρέαως [sic! but this should be κρέας], and contrahirt κρέως; σώζω heisst ich erhalte, errette; beides lässt sich sprachgesetzmässig verbinden zu dem Worte Kerosot [sic! a misprint for Kreosot], welches 'das Fleisch erhaltende, vor Verderben errettende' ausdrückt."

In the formation of compound nouns or adjectives in Greek, when a noun forms the first part of the compound, the stem form of the latter is generally used. Under "stem form" or "stem" is to be understood that portion of the noun which remains after the termination of the genitive is discarded. (Only general outlines can be given here; for details the reader who takes an interest in this subject is referred to Kühner's Ausführliche Grammatik d. Griechischen Sprache [2d ed., by Blass], I, 2, 329 sqq.) The stem

form may end either in a vowel or in a consonant. Assuming that a noun of the third declension, the stem of which ends with a vowel, forms the first part of a compound, then this stem may be joined to the second part directly, or else with the intervention of a so-called binding vowel," which is usually a short *o*. In some cases, the use of the binding vowel is optional; in most others it is ruled by custom. When the stem ends in a consonant, the binding vowel is necessary. Examples: (1) vowel stem: *ιχθίς*, fish. gen. *ιχθύος*, stem *ιχθυ*; *ιχθυ-βόλος* or *ιχθυ-ο-βόλος*, fish-catching. (2) consonantic stem: *σῶμα*, body. gen. *σώματος*, stem *σωμ*; *σωματ-ο-φύλαξ*, body guard; but without binding-vowel, *σωματ. εμπορία*, slave-trade ("body-trade").

Now there are some nouns of the third declension, ending in *-ας*, which have certain peculiarities. Among these is *κρέας*, flesh. We shall consider a few others at the same time by way of comparison—viz.; *γῆρας*, old age, and *κέρας*, horn. *Κρέας* has in the genitive either *κρέως*, contracted from *κρέα-ος* (the *a* is short), or *κρέατος*. Its stem, therefore, is either *κρεα* or *κρεατ*. *Γῆρας* has in the gen. *γῆρος*, contracted from *γῆρα-ος*. A form *γῆρατος* does not occur. Its stem is, therefore, only *γηρα*. *Κέρας* has in the gen. either *κέρως*, contracted from *κέρα-ος*, or *κέρατος*. Hence its stem is *κερα* or *κερατ*.

On examining now the compounds which occur in the actual language, and in which these three nouns form the first part, we find as a rule that, where the short stem (*κρεα*, *γηρα*, *κερα*) is used, the final *u* (which is short) is dropped and replaced by the binding vowel *o*. Thus we find compounds like the following, in which we will place a hyphen on either side of the binding vowel:

From *κρέας*: *κρε-ο-βορέω*, to eat meat; *κρε-ο-δόχος*, meat receiving; *κρε-ο-πώλης*, meat seller, etc., some 30 compounds actually occurring. In some dialects *κρεω* is used for *κρεα*, and *κρεω* is often spelled for *κρεο* in manuscripts.

From *γῆρας*: *γηρ-ο-τροφία*, *γηρ-ο-κόμος*, etc., some 10 compounds actually occurring.

From *κέρας*: *κερ-ο-βάτης*, *κερ-ο-φόρος*, etc., some 16 compounds occurring.

There are no compounds having the form *γηρα-* or *κερα-*, supported by the best manuscripts. In the case of *κρέας*, however, the form *κρεα* occurs in a few (5) compounds with the word *νομέω* and its synonyms or derivatives (*κρεα-νομέω*, to distribute [sacrificial] meat, *κρεα-δοσία*, gift of [sacrificial] meat, etc.). Here, however, the *a* is long, and appears to be contracted from *κρεα-ο*. These words are, moreover, old sacrificial technical terms, and do not count in the face of the many other words beginning with *κρεο*. Of course in such words as *κρέαγμα*, meat hook, the first part of the word is not *κρεα*, but *κρε*, the second word being *άγμα*. As this begins with a vowel the binding vowel *o* is not inserted.

It is curious that, as regards the fuller stems *κρεατ* (from *κρέας*, flesh), and *κερατ* (from *κέρας*, horn), only the latter appears as first part of a compound. There are no compounds beginning with *κρεατ* in the actual language, but modern authorities have, quite correctly, employed it in the formation of new words, viz.: *creat-ic*, *creat-in*, and *creat-inin*.

From the above it will appear that the "creosote" is that most in harmony with Greek usage.

The spelling "creasote" appears now only in the British Pharmacopoeia, and in various unofficial works of reference, price lists, etc. All other pharmacopoeias spell the word with "o."

\* *American Journal of Pharmacy*.

† Schweigger-Seidel's *Journal für Physik und Chemie*, vol. 65 (1832), p. 465.



## Soline, a New Alkaloid From the Solinaceæ.

Prof. J. U. Lloyd has isolated an alkaloid from the *Solanum carolinense* popularly known as "poison or ground potato," "horse nettle" and "tread soft," which has long been used among the negroes of the South as a domestic remedy for "fits" and convulsions. The results have been made public in a paper presented by Prof. Lloyd before the Cincinnati section of the American Chemical Society, and from this paper we publish the following:

### PREPARATION OF SOLINE.

Percolate the root of the plant with alcohol. Distill the alcohol in the presence of enough water to leave one part of residue in the still after the alcohol is recovered for every portion of four parts of the drug. Cool the residue and to it add sulphuric acid in slight excess, and then its bulk of water, and after twenty-four hours filter the supernatant liquid. Evaporate the filtrate to a creamy consistence, make it alkaline with ammonia, and abstract the alkaloid from it by rotations with chloroform. Evaporate the chloroform and abstract the alkaloid from the viscid dark residue by means of dilute sulphuric acid (1 in 50). Filter, make the filtrate alkaline with ammonia, and again abstract by chloroformic rotations. Repeat this operation until the material that is carried forward is soluble in both chloroform and diluted sulphuric acid. It is still of a dark color.

When this point is reached evaporate the chloroform solution, and when the residue becomes of a viscid condition abstract it with boiling sulphuric ether, U. S. P. 1890. Decant the ether and continue the abstraction of the residue with successive portions of boiling ether until it is exhausted. Evaporate the mixed ethereal solutions, which will yield the alkaloid in yellowish minute crystals.

Purify by solution and crystallization from boiling anhydrous alcohol, when the alkaloid will be obtained pure and colorless.\*

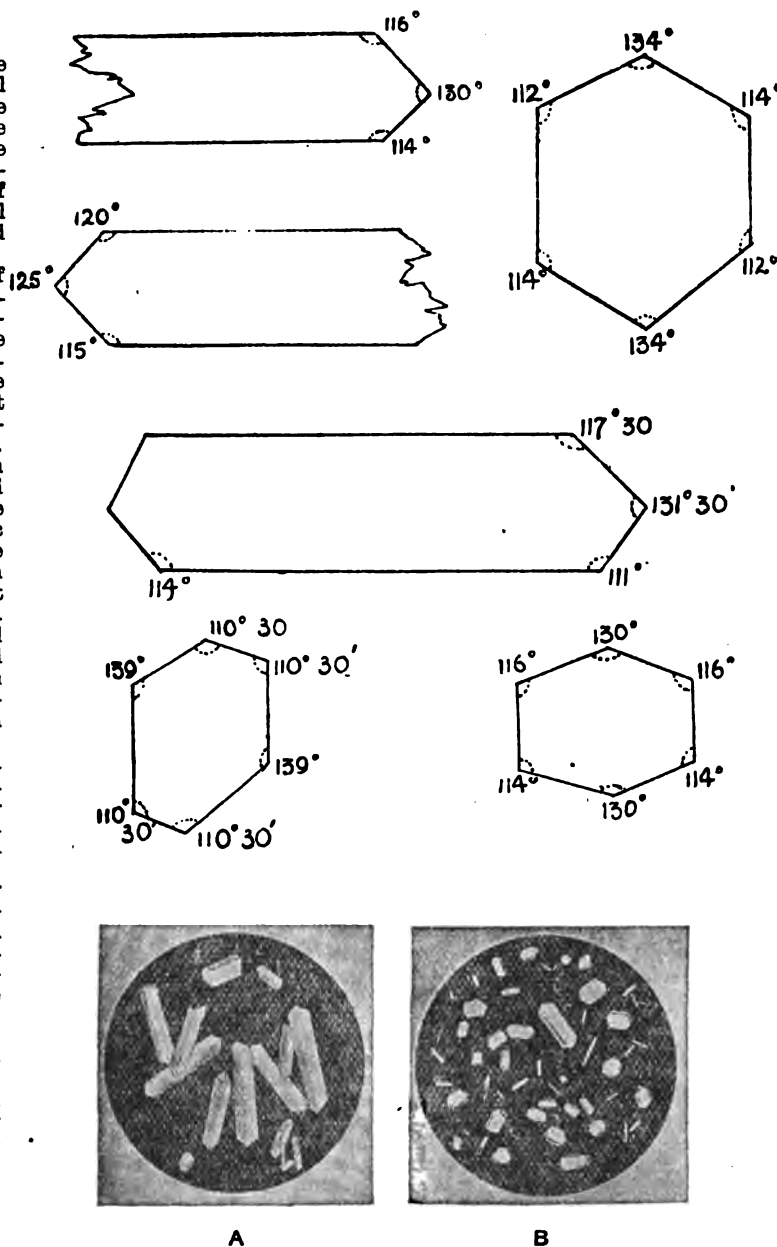
**Properties.**—This alkaloid, to which I have ventured to affix the name *soline* in order to give it an existence in literature, is in the form of white, brilliant crystals (see Fig. A), and is practically insoluble in water and dilute ammonia. It dissolves freely in all the dilute sour acids, forming very soluble salts, that are acrid and bitter, leaving a persistent tingling sensation on the tongue. The salts have not yet been crystallized.

It is very soluble in cold chloroform and in boiling alcohol; from the latter it

separates on cooling in large needle-like crystals resembling hydrastine; from the ether by evaporation it remains as a glassy residue. It is precipitated in minute crystals from alcoholic solution by the addition of water. It yields ammonia on heating with caustic potash.

On evaporating the mother liquor spontaneously no other alkaloidal crystals appeared until it had been reduced to a thin layer, when a crop formed of the general appearance (Fig. B). The fact that such

Plate I.



Soline, from *Solanum Carolinense*.

an interval of time and alcoholic evaporation separated the two crops of crystals as well as their general appearances led to the surmise that they might be different substances and of distinct systems.

Prof. Prescott of Ann Arbor enlisted the services of Prof. W. H. Pettee, professor of mineralogy in the University of Michigan, who kindly determined their faces and angles, reported as follows:

\*We are indebted to the American Journal of Pharmacy for the loan of the plate.

Soline crystallizes in the orthorhombic system. The crystals are, as a rule, tabular, or at least thinner than they are wide or long. Some are nearly equal in width and length, others are elongated or rod like, but in the latter case the rod appears to be flattened, and terminated at the ends by pyramidal faces. The accompanying sketches (tracings in Plate I) are not mathematical delineations, but are designed merely to show the variations of different crystals when measured by the goniometer.\* The crystals were so small that I was unable to measure any of the interfacial angles. They were examined as they lay against the bottom and the sides of the beaker glass, and with the aid of transmitted light. The angles measured were the plane angles between

the sides of the polygonal faces as they appeared under the microscope. There was no way of telling what angle the plane of the polygon made with the line of light, and the measurements cannot be regarded as very accurate. A considerable number of different individual crystals were examined, with the view of ascertaining whether the angles so measured would correspond sufficiently well with each other to justify the belief that the several forms seen in the two beakers belonged to the same crystallographic system and had the same crystallographic contacts. It will be seen that the sides of the long or rod like crystals A average about the same as those of the shorter form B, the difference being simply in the length of the parallel sides.

On reviewing the literature of the subject it is found that in 1890 Mr. G. A. Krauss† made a chemical examination, establishing the presence of an alkaloid soluble in ether and petroleum ether, and another that was left in the abstracted drug, and was taken therefrom by alcohol. He accepted that these alkaloids were different, although he obtained so little of the ether soluble alkaloid as to scarcely render a decision positive. The alcohol soluble alkaloid was in his opinion identical with solanine.

1891,‡ Mr. Krauss continued the subject by an examination of the leaves of the plant, failing therefrom to obtain an ether soluble alkaloid. However, he obtained an alcohol soluble alkaloid which he also identified as solanine by color reactions.

In the same year¶ Mr. Harry Kahn obtained evidences of an alkaloidal reaction from this drug by means of the Parsons scheme of analysis, but did not obtain the alkaloid.

Again Mr. Krauss§ contributed a paper on the analysis of the berries, obtaining therefrom an alkaloid resembling the specimens previously determined as existing in the leaves and root of the plant. The contributions of Mr. Krauss demonstrate that to his credit should be placed

the establishing of the alkaloidal nature of *Solanum carolinense*. Whether either his or my alkaloid is identical with solanine is perhaps not thoroughly demonstrated, and I prefer until it is obtained in large amount and established positively to allow the name soline to remain condi-

†Am. Journ. Pharm., 1890, p. 601.

‡Am. Journ. Pharm., 1891, p. 65.

¶Am. Journ. Pharm., 1891, p. 126.

§Am. Journ. Pharm., 1891, p. 216.

\*This method is the process of discovery, circuitous as compared with methods that can be evolved now that the alkaloid character has been established.



tionally attached to the substance described in this paper.

Having never made a study of solanine, I am not prepared to decide concerning the identity of solanine and that substance. If Wittstein's description is correct, they are different. He describes solanine as "flat, quadrangular crystals."

Soline crystals are not flat, although variations in crystalline form within one system is not conclusive evidence.

Wittstein says furthermore, Solanine is "not soluble in ether."

Soline, upon the contrary, was made by abstracting the alkaloid by means of boiling ether.

If solanine as made by me (I found no other alkaloid) is the alkaloid obtained by Mr. Kraus, it must be his other soluble alkaloid, unless his alcohol soluble alkaloid is also soluble in ether, in which case (Wittstein) it is not solanine.

As a summary it may be said that my work supports the experimental announcement of Mr. Kraus in that it demonstrates that this plant must be placed with the alkaloid bearing drugs. The figures of the crystals in the frontispiece convey for the first time in print the appearance of crystals of ordinary size. A considerable amount of the alkaloid is now in my possession and will be forwarded to Prof. Trimble for further examination, with a view to establishing its location permanently.

The following are references to the drug:  
*American Journal of Pharmacy*, 18-9, 552; 1890, p. 601; 1891, p. 65; 1891, p. 126; 1891, p. 216.  
*Transactions of Med. Society*, 5, C., 1889.  
*Virginia Med. Monthly*, Sept., 18-9.  
*Notes on New Remedies*, Sept., 1891.  
*Chicago Med. Times (Eclectic)*, 1889, p. 555.  
*Chicago Med. Times (Eclectic)*, 1890, p. 8.  
*Chicago Med. Times (Eclectic)*, 1891, p. 162.  
*Eclectic Medical Journal*, 1891, p. 534.  
*Eclectic Medical Journal*, Sept., 1893, p. 453.  
*Eclectic Annual*, Vol. I, p. 25.  
*American Therapist*, Dec., 1892. Copied from E. M. J., 1893, 455.  
*National Dispensary*, 1894, p. 592.  
*United States Dispensary*, 1894, p. 1714.

### The New Antidote for Morphine.

By L. A. HARDING, B.Sc., Ph.D.,

Fergus Falls, Minn.

Every little while the world is startled by some new and useful discovery, and at present the great agitation produced among the medical profession is the discovery of a new supposed antidote for morphine poisoning, namely, permanganate of potash. Not only the medical press, but also the lay press, has taken up the subject and heralded the merits of this wonderful remedy, and many conjectures are formed as to how much practical value is connected with this discovery. It has been known for a long time that the value of permanganate of potash depended only upon its oxidizing power and the freedom with which it is capable of yielding up its oxygen; it has been claimed that the oxygen was held in its nascent state by the permanganate and the phenomena of its oxidizing power simply revolved themselves around this fact; but whether this is a right or erroneous conjecture, the fact remains true that it will yield oxygen to almost all organic substances, with a greater or lesser degree of rapidity, though the decomposition, as indicated by Dr. William Moor, can scarcely be accepted as correct. His theory is as follows:

$Mn_2K_2O_8 = MO_2 + MKO_2 + KHO + O_2$

As will be seen in the decomposition formula (if we may call it such), we have too much oxygen. But this is of no material consequence, matters of more importance demanding our attention.

The observations made by Dr. Moor, to hold a 1 to 2,000 solution in his mouth for

fully five minutes without any serious deoxidation of the permanganate of potash, is no criterion of its non-decomposition in the buccal cavity or its connecting parts, for alkaline properties, or an alkalinity of the contents of any cavity favor the non-decomposition, and the decomposition of the permanganate in an alkaline fluid proceeds but very slowly. A test tube full of water (which contained soluble organic substance) which had been made alkaline, and to which had been added a few drops of solution of permanganate of potash, did not begin to discharge its color for nearly an hour; acid solutions favor the decomposition of the permanganate, and the advice to give an acid of some kind in case of opium poisoning, or in case of any of the salts of morphia, and vinegar being advised by Dr. Moor, is erroneous beyond measure; for do not textbooks teach, and experience has proven, that acetic acid especially decomposes permanganate?

The action of the permanganate upon albumin and peptone, is a criterion only as far as they go, for the stomach usually contains starches, etc., in addition to albumenoids and peptones; starches especially decompose the permanganate quickly; raw starch has but little action upon it, but boiled starch in any form quickly demands its attention. We may say people do not eat much boiled starch. This idea is, however, quite erroneous, for potatoes and bread contain a large amount of starch, which is only partially acted upon by the alkaline secretion of the mouth during mastication; it lies dormant in the acid fluid of the stomach, but is converted and absorbed in the small intestines; this starch also, while it lies dormant in the stomach, quickly attacks the permanganate. Were nothing to interfere, one grain of permanganate of potash would be able to oxidize more than one grain of morphia; so almost anything, if taken in doses large enough, may prove an antidote for morphia. Now suppose the morphia has entered into the circulation, would this still be counteracted by the permanganate? The advocates of this remedy may say yes, for has not Dr. Hitzig, of Halle, proven beyond doubt that morphia which has entered into circulation will return to the stomach, be secreted there by the glands, and acted upon by the permanganate as fast as secreted? This is very nice in theory, but in practice how about the glandular coating of the stomach? Will this not be partially destroyed by the continued contact with the permanganate, and thus secretion likewise be destroyed? We have grave fears of corrosion. As has been mentioned before, deoxidation would quickly take place in acid media; this assumption is without doubt true, for were it not so the permanganate would certainly be absorbed, enter the blood, and cause disturbance there. The latter not being the case, is quite conclusive evidence that oxidation of the lining of the stomach must result, and any poison having entered the circulation is sure to stay there, unless counteracted by physiological antidotes; the proposition to give hypodermic, or intra renal, injections of the permanganate seems ridiculous, for blood would soon annihilate it.

We will not attempt to state here, at the present, what changes would occur, but we may easily judge what might happen when we stop to consider the composition of blood, namely fibrin, serum, albumin; and we can draw conclusions as to what the probable results would be; and it seems more ridiculous when we remember that one part of permanganate of potash is soluble in not less

than 16 parts of water, and that at this state of solution it possesses very corrosive properties, and would quickly destroy any oxidizable substance; and as at the rate of dilution at which the doctor uses it by the stomach, namely two grains to the ounce, it would take quite an amount for injection, how foolish to accept this as rational.

The French Academy of Sciences at one time largely used permanganate of potash for flushing the stomach, and suffice it to say, that it required quite a number of douches successively to eject the solution in its characteristic color. This would go to show that it does not require very much to destroy the permanganate, and we are very sceptical as to accepting any statements made in relation to the permanganate as antidote for morphia in face of the damaging evidence of its chemical behavior.

### Glucose as a Preservative of Syrup of Iodide of Iron.

This formed the subject of a paper by William Lyon at a recent meeting of the Edinburgh branch of the British Pharmaceutical Society.

He had repeated and extended the experiments of G. H. Charles Klie of St. Louis, who had used glucose instead of cane sugar, and who had recommended that either the whole or part of the sugar should be displaced by glucose. The various syrups Mr. Lyon experimented with were all prepared according to the B. P. directions, the boiling being, of course, omitted. Placed in bottles only half filled, which were allowed to stand in a place not exposed to direct sunlight, and which were corked at the end of two months, a B. P. syrup was quite unfit for use, as was also one of the samples in which 1 per cent. of cane sugar had been replaced by glucose. Where the percentage of glucose ranged from 2 to 6 there was a gradual improvement, while where it was 8 per cent., or higher, there had been no decomposition. In syrups containing more than 10 per cent. of glucose precipitates formed, and as this would be a serious objection to the use of glucose as a preservative, a quantity of glucose had been prepared and barium carbonate used to remove the sulphuric acid. The result so far had been satisfactory. If a pure glucose could be obtained no serious objection could be taken to the presence of, say, 10 per cent. of it in the syrup, which would then keep for a considerable time.

### Test for Peptone in Urine.

Wesener offers the following tests for peptone in the urine (*Chic. Med. Rec.*, 1894, vol. vi, No. 1, p. 7). If the urine contains albumin or mucin these must first be removed. Albumin is removed as follows: to 50 cc. of urine add 10 cc. of a saturated solution of sodium acetate, and then a concentrated solution of ferric chloride, until a deep red color is produced. Now add potassium hydrate drop by drop until neutral, then boil and filter; test a portion of the filtrate for albumin. Apply the acetic acid and potassium ferro cyanide test. If albumin is found the filtrate must then be treated again with a little sodium acetate and ferric chloride solution, boiled and filtered. This is repeated until the test for albumin fails to react. The remaining filtrate, having been allowed to cool, is then treated for peptone by adding a few drops of sodium hydrate and two or three drops of cupric sulphate; this gives a purple color if peptone is present and is known as the biuret test. A saturated solution

of tannic acid gives a good reaction with peptone, but does not show traces that will be shown by the biuret test, and should any of the iron be left in the filtrate it will form, with tannic acid, the tannate of iron, which would obscure any precipitate formed. The removal of albumin by this method has the advantage of also removing the greater part of the coloring matter from the urine.

Devoto commends the precipitation of albumin with crystals of ammonium sulphate. This takes more time and, as regards the urine, has no advantage over the method given. If peptone is tested for in the blood or visceral fluids Devoto's method should be used, as the results are more accurate.

Albuminous urine which has been decomposed cannot be tested for peptone, as some of the albumin has been converted into peptone and would give a reaction which would be of no clinical value, even though the albumin has been removed. This also applies to decomposed non-albuminous urine, since bacteria have an albuminous structure peculiar to themselves which will react unless removed. Urine containing mucin appreciable with acetic acid must be freed from it. To 20 cc. of urine add just enough lead acetate solution to produce a flocculent precipitate, an excess must be avoided; filter and test filtrate for peptone, using the biuret test. A simple method of making a quantity estimation for peptone is as follows: to 10 cc. of urine apply the biuret reaction; then dissolve a known quantity of peptone in 10 cc. of normal urine, and apply the biuret test. Repeat the last operation until the colors are identical. Having a known strength of peptone for comparison, the amount of peptone can be estimated.

### Alkaloidal Assaying.

#### IPECAC.

The method described in this paper for January 25, p. 41, has, through an extended application, been improved, chiefly by using a modified mixed solvent, and is now offered in two forms: (1) 12 gm. powdered ipecac are deprived of fat with ether and transferred to a tared vial of 200 cc. capacity by the method described under the assay of *Nux Vomica* (*Am. Journ. Pharm.*, 1894, 42,) the weight of the ether made up to 90 gms. and 80 gm. chloroform added; after 5 minutes 10 cc. water of ammonia (10 per cent.) are added, the mixture thoroughly shaken during one-half hour, 10 cc. water added and again agitated for two or three minutes; 100 gms. of the clear liquid are decanted, the solvent distilled off, the residue taken up twice with small quantities of ether (to remove the last portions of chloroform), heated for 15 minutes in a water bath at 100° C., weighed and titrated.

(2) 12 gm. powdered ipecac are placed in a vial of 200 cc. capacity, agitated frequently during 5 minutes with 90 gm. ether and 80 gm. chloroform; after adding 10 cc. water of ammonia and allowing to stand for one-half hour 10 cc. water are added, and 100 gm. of the clear solution transferred to a separating funnel, where it is agitated with three portions of 25, 15 and 10 cc. of one per cent. hydrochloric acid; the acid solutions are next transferred to the separating funnel, made alkaline with ammonia and extracted with two portions of 50 gm. each of a mixture of chloroform three parts and ether two parts; the alkaloid solutions are filtered through an ether-wetted filter into a tared flask, the solvent recovered (the last traces

of chloroform removed as above), the residue dried, weighed and then titrated as in the original publication. The difference (0.006-0.18 per cent.) between the weight of the alkaloids and the amount ascertained by the titration is much less than in the original method (0.055-0.335 per cent.). To determine to what extent emetine is present in the woody portion of ipecac root best grades of dry Rio and Carthagens root were selected and the bark and wood carefully separated and used for the assays. Rio: bark 2.908 per cent., wood 0.533 per cent. Carthagens: bark 2.92 per cent., wood 0.65 per cent. In the examination of the woody portion if the results are much higher than 0.5-0.6 per cent. it would indicate that the root had become wetted. These figures for the wood, while higher than those generally quoted, still warrant the requirement that in providing the root the woody tissue be removed as far as practical.

#### HYDRASTIS.

Hydrastine being the active constituent only this is considered in the assay which is based upon the same principles as that of the assay of ipecac. (1) Powdered hydrastis 12 gm., ether 120 gm., water of ammonia 10 gm., water 15 gm.: 100 gms. (representing 10 gms. root), are to be decanted, the solvent removed and the residue weighed. (2) Powdered hydrastis 25 gm., ether 125 gm., water of ammonia 10 gm., water 30 gm.: 100 gm. decanted (20 gm. root), extracted with dilute hydrochloric acid, etc., as described under method (2) for ipecac assay, the yield of crude alkaloids is 2.68-2.97 per cent. As hydrastine cannot be titrated, the crude alkaloid is dissolved by the aid of heat in 8 cc. alcohol, 4 cc. ether and then gradually 20 cc. water added; after standing for 24 hours almost the entire quantity of hydrastine will have crystallized out, so that the crystals can be removed to a filter, washed with about 6 cc. cold water, transferred back to the flask, dried and weighed. Berberine can be extracted from the drug, previously extracted with ether, by the use of alcohol and precipitating as nitrate or tri-iodide.

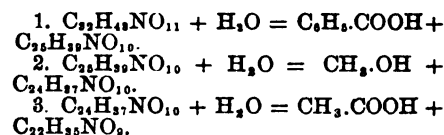
#### CEVADILLA.

Powdered cevadilla seeds 15 gm., ether 150 gm., water of ammonia 10 gm., water 80 gm.: 100 gm. (10 gm. drug) are decanted, agitated with dilute hydrochloric acid, etc., as above using ether as the solvent of the alkaloids. The yield of crude alkaloids is 4.25-4.35 per cent. compared with 1.2 per cent. of other investigators. The crude alkaloid represents a mixture of veratrine and veratridine ( $C_{27}H_{45}NO_8$ , mol. weight 591), sabadilline ( $C_{27}H_{45}NO_8$ , = 764), sabatine ( $C_{27}H_{45}NO_8$ , = 516), and a few other alkaloids occurring only in minute quantity, which can easily be titrated. From experiments the purified alkaloid has an equivalent weight of 620-680, so that one cc.  $\frac{n}{10}$  hydrochloric acid represents 0.0625 alkaloid.—C. C. KELLER (*Schw. Wochenschr. f. Chem. u. Pharm.* through *Am. Jour. Pharm.*)

### The Chemistry of Aconitine.

In the *Berichte* of March 19—containing the paper by Professor Dunstan, the substance of which was published at page 785—there is another paper by Freund and Beck, setting forth in more detail the evidence by which they have been led to dispute the conclusions arrived at by Dunstan. In regard to the observation that acetic acid is a product of the hydrolysis of aconitine, Freund

states in a postscript that positive evidence of this fact was furnished by Ehrenberg and Purfirst in 1892 (*Ph. J.*, [3], xxiii., 86), but that he will defer further reference to that point until he learns how Dunstan reconciles the hydrolysis of aconitine with the formulæ he has hitherto adopted. In reply to the charge of discourtesy, he claims to have abstained from interference with Dunstan's investigation, and to have merely repeated and supplemented the experiments of Ehrenberg and Purfirst. He also repudiates any obligation to have informed Dunstan that he was thus led to doubt the accuracy of Wright's formulæ. Referring first to Dunstan's confirmation of Wright's formulæ for aconitine and for the products of its hydrolysis (with addition of two atoms hydrogen), and of the statement that aconitine is converted by hydrolysis into benzoic acid and an amorphous base aconine, he mentions that some years before Jurgens had adopted for aconitine the formula  $C_{34}H_{51}NO_{11}$ , and that Dragendorff, guided by apparently unpublished observations by Jurgens, took a different view of the hydrolysis, according to which aconitine was considered to split up into benzoic acid and picroaconitine, the latter being converted by further loss of benzoic acid and of methyl alcohol into aconine. Another view of the composition of aconitine and of its alteration was then put forward by Ehrenberg and Purfirst, who adopted the formula  $C_{34}H_{51}NO_{11}$ , and represented the alteration by hydrolysis by the following equations:



The experiments of the last-named chemists were repeated in order to clear up the discrepancies between the foregoing statements. Material for that purpose was obtained from E. Merck in the form of hexagonal crystals melting between 197° and 198° C. when rapidly heated. The analytical data obtained differed considerably from the figures calculated from Wright's formula,  $C_{34}H_{51}NO_{11}$ , approximating nearer to those required by the formula assigned to apoaconitine,  $C_{33}H_{49}NO_{11}$ . From the statement by Wright that aconitine is readily convertible into apoaconitine it might have been supposed that such an alteration had been effected, if the more recent work of Dunstan had not led Freund to doubt that assumption. The precise description of aconitine salts by Dunstan sufficed to settle that question, and it was found with surprise that while the substances were identical with those described by Dunstan, there was, however, a difference in their composition, Dunstan representing it by the formula  $C_{33}H_{49}NO_{11}$ , while Freund and Beck adopted the formula  $C_{34}H_{51}NO_{11}$ . Freund disputes the accuracy of the analytical data upon which Dunstan states his aconitine to be identical with Wright's, and since those data are the only evidence of identity, he holds that this is still an open question. Having regard to the alleged very close similarity of aconitine and apoaconitine, and to their own observations, Freund and Beck infer that both Wright and Dunstan have been misled by incorrect analyses, and they consider there is no evidence of the existence of apoaconitine. The data corresponding to the formula  $C_{33}H_{49}NO_{11}$ , assigned to japaconitine by Wright and Luff, agree with the formula  $C_{34}H_{51}NO_{11}$ , and that circumstance, as well as other facts, suggested the possibility that the

base examined by Freund and Beck had been obtained from Japanese aconite, and not from *A. napellus* tubers, until they were assured by Merck to the contrary. But they have no doubt as to the identity of the base from both sources. A molecular weight determination gave a mean result of 663 for japaconitine (calculated for  $C_{27}H_{41}NO_{11}$ , 645), showing that the more complex formula is unnecessary.

According to Ehrenberg and Purfürst, aconitine contains four methyl groups separable by hydriodic acid in the form of methoxyl, and this statement is confirmed by Freund and Beck.

The results obtained by analysis of the gold salts of aconitine agree with the formula  $C_{27}H_{41}NO_{11}$ , and it is pointed out that this agreement was found to exist in the results obtained by Dunstan and Ince in seven analyses of the  $\beta$ -modification, but was attributed by them to the presence of impurity.

By boiling aconitine with water a clear solution is ultimately obtained, having a slight acid reaction. The product of 50 grammes yielded on evaporation 12 grammes of acicular crystals consisting according to Freund and Beck of picroaconitine benzoate, the quantity of benzoic acid formed showing that only about one-fourth part of the aconitine was split up, with formation of benzoic acid. The larger portion was split up into acetic acid and picroaconitine. The benzoate melted at  $203^{\circ}$ - $204^{\circ}$ , and the results obtained on analysis agreed with the formula  $C_{27}H_{41}NO_{11} \cdot C_6H_5COOH$ . A methoxyl determination gave 8.36 per cent. (calculated 8.27). Ehrenberg and Purfürst obtained 8 per cent. methyl in two analyses. The picroaconitine separated from this salt remained as a colorless varnish on evaporating the ether solution. In a pure state it is a white amorphous powder, melting at  $125^{\circ}$ C. with intumescence, and otherwise corresponding exactly with the description given by Dunstan of isaconitine, the identity with that substance being further ascertained by the examination of the hydrobromide, hydrochloride, hydriodide, and nitrate. In the second portion of crystals deposited from the solution obtained by boiling aconitine with water it was easy to detect the presence of acetic acid. After separating these crystals the remaining solution was mixed with ether and soda added until a precipitate was no longer formed. The alkaline liquor from which the ether solution had been separated was evaporated to dryness and the residue extracted with chloroform. The portion dissolved by chloroform being examined for aconine gave a hydrochloride presenting characters agreeing with those described by Dunstan for aconine hydrochloride, but analytical results corresponding with the formula  $C_{27}H_{41}NO_8$ . Aconine was also obtained from picroaconitine by hydrolysis as a further means of identifying picroaconitine with Dunstan's isaconitine.

The amount of benzoic acid produced was found to be 19.6 per cent. (calculated 20.28 per cent.), and the hydrochloride of the base gave on analysis results agreeing with the formula  $C_{27}H_{41}NO_8$ . By heating picroaconitine for fifteen minutes with acetic anhydride, then diluting with water, and shaking out with ether, after addition of ammonia, the residue left on evaporating the ether solution became crystalline when rubbed with alcohol. By crystallizing from hot absolute alcohol prismatic crystals were obtained, melting at  $255^{\circ}$ - $256^{\circ}$ , and after drying at  $120^{\circ}$  they gave on analysis results agreeing with the formula  $C_{27}H_{41}NO_{10} \cdot COCH_3$ , while the alcohol contained an amor-

phous substance not further examined. It now appears that the substance named picroaconitine by Freund and Beck and isaconitine by Dunstan is not an isomer of aconitine, but a product of its alteration. The chief question between these investigators relates, however, to the composition of aconitine itself—whether that is to be represented by the formula  $C_{27}H_{41}NO_{11}$ , or  $C_{27}H_{41}NO_{11}$ .

### The Ownership of the Prescription.\*

The question who owns the prescription has a periodical agitation. Sometimes it comes up in court, occasionally in a medical society, but oftener as one of issue between the physician and the druggist. We are reminded that there are some points connected with its solution that are not yet definitely settled, as every little while interrogatories reach us from widely different localities. This time a correspondent asks if a pharmacist should not be compelled to surrender the prescription to the physician writing it when the latter demands it; also whether the pharmacist has a right to repeat its administration in a given case against the wish of the writer of the same; and lastly, if it is not customary to respect the wishes of the physician under such circumstances.

The subject from these points of view is quite a complex one, when we take into account the number of conditions that obtain from the giving to the taking of the prescription. In a general way we may assume that there are three principal factors to be considered: the physician, the patient, and the pharmacist. In order that each should be suitably protected, a number of considerations should be taken into account. The prescription is an order on a pharmacist for drugs, which is given by the physician to a patient as part of the advice and treatment of the latter for a particular ailment at a particular time. So long as all the conditions are fulfilled in their natural sequence, with a perfect understanding of indications to be met, there never is trouble, and the entire transaction is a straightforward business one. In fact, the only interruption to the harmonious action is where a special claim is made of actual ownership of the prescription.

The question has been viewed from the respective standpoints of the physician, the pharmacist, and the patient, and much unnecessary confusion as to relative rights has thereby resulted.

If, however, we bear in mind why the prescription is written, we can the easier come to some conclusion as to the apparently mixed question of proprietorship when its real purposes are fulfilled. The physician who gives the prescription intends that it shall be used only in accordance with his directions. He is not responsible beyond this, and if the patient insists upon disobeying orders, the physician does not necessarily share the risk, or become accountable for any bad results. Hence the prudent patient follows directions as to whether or not the prescription shall be repeated. In an equitable sense, it is the patient's property only in so far as it can serve the specific purpose for which it was given. When such conditions have been met, the prescription ceases to be as such; and practically, as far as either prescriber or patient are concerned, it has no more existence than if it had never been written. When the patient is no longer in need of it medically, and persists on

his own account in repeating the prescription, he is appropriating that which, professionally speaking, does not belong to him, and he does a still greater wrong when he gives it to another whom it may seriously harm, and then the new man who takes the medicine is the bigger fool of the two.

But just here the pharmacist is generally the culpable go-between. While there is no law to prevent a patient repeating a prescription as often as he pleases, it is ethically wrong for the compounder to allow him to do it. The prescription is not in any sense so much the property of the druggist that he can do what he pleases with it. It is simply a particular order for drugs, and can in no proper sense be used as a general one on demand by any would-be customer. The pharmacist places the prescription on file as a legal evidence that he has fulfilled a special contract. It is, in fact, his only protection against subsequent damages arising from alleged inaccuracy in compounding, or mistakes in the selection of ingredients. But he owns it as a voucher only, and cannot legitimately use it for any other purpose. Consequently, when he attempts to do otherwise he is in every way transcending his functions, and acting most unjustly to both physician and would-be patient. If such is granted, the questions arising in connection with the whole matter are simple enough, and appeal to the good sense of all parties concerned.

It has been legally held by several judges in this and other States that the proper owner of the prescription is the pharmacist. He is responsible for a proper compounding and has a right to it as a voucher. There is no law to prevent his repeating it in any manner he chooses, and the patient, or anyone else, can buy the compound of which it is the order if the druggist chooses to sell the same.

If the mixture contains any poisonous ingredients, or the patient can claim to have been damaged by taking it, the compounder is liable for damages as a seller of poisons without license. The patient, however, is a free moral agent up to the point of attempting to commit suicide by taking a poisonous drug. In case of any serious perversion of the original intent of the prescription, both parties in the action are culpable and take any extra responsibility at their peril. In ordinary cases, however, no legal interference is contemplated. If a druggist recommends the prescription to a stranger, he virtually attempts to give him medical advice, which opens him to the charge of practicing without legal authority.

Unfortunately, there is no remedy that will legally fit such unprofessional usages. The physician has no power to insist upon a return of his prescription or forbid its indiscriminate use, save on purely professional grounds of common courtesy. When the prescription is given to the patient it is virtually beyond the prescriber's reach. The patient having paid for it as part of the advice given, claims the right to use it for himself as often as he sees fit, and can with the druggist's consent secure a copy of it for such purposes. It is usual, however, for the pharmacist with a proper moral sense to respect the wishes of the prescriber, and when he does not do so, it is also customary for the physician to obviate the necessity of having any difference of opinion upon the subject in future by advising the patient to patronize some other shop. Very often, too, the physician retaliates in kind by furnishing his own medicines whenever suitable opportunities offer.

\* *Medical Record.*

## Medical Notes.

**An Old Antidoteto Poison Ivy Revived.** *Grindelia robusta* has recently been highly lauded as a remedy for poisoning by *hus toxicodendron*.

**New Glucoside for Ophthalmologists.**—Escorcin, derived from the horse chestnut, has been found useful by Frohlich in agnosing lesions of the cornea, the latter being stained pink in places where there is interruption of continuity of the epithelial covering.

**Amaranthus polygamus**—A decoction of the root of this plant is recommended by Dr. Bärwald (*Tägliche Rundschau*) as a remedy in hæmaturie attendant upon periculous fevers. In a few hours after drinking an infusion the temperature is lowered and the blood becomes changed.—*Pharm. Centralh.*, 1894, 163.

**Colocynthin as a Purgative for Dogs.**—I. Baum (*Pharm. Central.*, 1894, 201) recommends the use of pure colocynthin, dissolved in alcohol and glycerin, by rectal injection as a purgative for dogs. For a large dog 0.025 gm. should be dissolved in 35 gm. each of alcohol and glycerin. If satisfactory results do not follow the dose may be repeated. For small dogs 0.025 should not be exceeded, as there is danger of causing inflammation of the bowels. The action is not to be depended upon for horses, sheep and hogs.

**Pyocyanine as a Remedy for Ptyalism.**—In the March number of the *Annales des maladies de l'oreille, du larynx, du nez et du pharynx* there is a short abstract of an article by Heimann, published in the *Therapeutische Monatshefte* for February, in which the author relates a case of idiopathic ptyalism that had withstood various kinds of treatment, but was finally overcome by painting the whole of the interior of the mouth twice a day with a 1-to-1,000 solution of pyocyanine. The treatment lasted three weeks and the cure was permanent.

**Lameness Following Shock from Telephone.**—Dr. Ewald reported the case at a recent meeting of the Hufeland Society of a telephone girl who had become lame along one side after a shock sustained while engaged in her duties at the central station. Some doubt was expressed in the discussion of the case as to whether the electric shock was really the prime factor in the case, but Dr. Ewald thought it was. He called attention to the fact that if the call bell handle be turned very rapidly an induced current would be produced of as high as 40 volts, which is about ten times as high a current as is ever used in electrotherapeutics.

**For the visceral complications of acute rheumatism.** Jaccoud (*Wiener medizin. Presse*, 1894, No. 9, p. 329) recommends the administration of the tartrate of antimony and potassium hourly, in doses of one twentieth grain, in mucilaginous solution. Care must be observed not to administer a narcotic simultaneously. The treatment is followed by a rapid decline of temperature, the pains subside, and even large effusions grow less. As a rule, diarrhoea and vomiting result, but these should not be viewed as contra-indications, unless aggravated. The patient should be under constant observation during the continuance of the treatment.—*Med. News*.

**The Treatment of Acute Pericementitis.**—For acute pericementitis I have used a hot pack on the neck and side of the face with three or four thicknesses of heavy toweling wrung out of hot water. At the

same time I give calcium sulphide one-tenth grain every ten minutes for the first hour, every fifteen for the second hour, and one every half hour for two or three hours longer. To arrest pain at night use:

Acetanilid.....gr. viii  
Syr. simple.....3 ij  
Spir. frumenti.....3 ij

Take one-half the above at five or six P.M., and the remainder at ten P.M.—A. W. HARLAN in *Dental Review*.

**The Treatment of Influenza**—Dr. Juche Rénoy closed a recent clinical lecture at the Cochin Hospital, Paris, published in the *Journal des praticiens* for March 7, by dividing cases of influenza, as regards treatment, into the grave, the pseudo-grave and the benign. For the first class he recommended bathing, refrigeration, and the use of alcohol. In the second, he advised small quantities of alcohol, plentiful drinks, and revulsion by means of mustard plasters and drycupping. For the third class, if there was pain, he said it was allowable to use antipyrine and salicyrène, but he impressed it upon his hearers that these drugs should not be used in the treatment of influenza unless the kidneys were performing their function well. He added that antipyrine was dangerous in all cases of profound and long-continuing infection. As for quinine, he said, it was of no use whatever. This he had proved over and over again.

**Sprays in the Treatment of the Upper Air Passages.**—Rice (*N. Y. Med. Jour.*) believes that the recent petroleum products, e. g., benzoinol, glymol, lavolin (not lanolin), etc., are preferable to the old astringent remedies so long employed. Zinc and silver, tannic acid, etc., should never be sprayed into the anterior nares. They may, even in weak solutions, cause coryza, a purulent disease of the accessory sinuses and even of the middle ear. The physiological action of the simple oily preparations is indefinite. They may be merely protective or may serve as a non-irritating vehicle for cocaine, iodoform, pine needle oil, menthol, etc. Such combinations are first stimulating (capillary action increased), and later sedative and antiphlogistic. Too long a continuance of the oily spray leads to dryness of the mucous surface and a contraction of the erectile tissues, suggestive of atrophy. They will, however, so greatly reduce congestion that operative measures, at first apparently necessary, may be no longer called for. The best results in any case are obtainable only where the patient has been taught to use the up-tipped atomizer behind the soft palate.

**Extract of Bone-marrow in the Treatment of Anemia.**—Mann (*Lancet*, No. 8680, p. 599), viewing the red matter of bone as the chief agent in promoting the development of red blood corpuscles, concluded that an extract of this substance, introduced into the human organism while in an anemic state, might act as a stimulant to the formative process, and increase the rate of production of the red corpuscles. As the tissue-forming power is more active in young than in older animals, the bones of the former are to be preferred as a source of the extract. To prepare this the heads of the long bones obtained from recently killed calves, with other portions of bone that contain red marrow are broken into small pieces and digested in glycerin, with frequent agitation. The extraction is complete after the lapse of several days, when the extract is filtered off and is ready for use. It is red or reddish-brown in color and devoid of unpleasant taste or odor. It may be given in teaspoonful doses once or twice daily. In a series of cases of anemia of varying

kind and origin in which the extract was employed encouraging results were obtained.

**Treatment of Measles by Eucalyptus Inunction.**—Dr. C. E. Shelly reports (*Practitioner*) the use of eucalyptus inunction in a series of cases of measles. The favorable reports of other observers were not confirmed. The total number of cases observed was seventy-three. Of these, five received the treatment by eucalyptus. Inunction was begun directly they came under observation, night and morning for three days, and subsequently once a day for the first week. Eucalyptus emulsion was given internally, some of the fluid was placed in saucers about the room, and when cough was troublesome eucalyptus inhalations were given. The results were not at all favorable. There was unusual drowsiness: "all five patients sleeping almost constantly, being aroused with some difficulty to take their food, and remaining awake only just long enough to consume it." All five had tongues thickly coated with white fur, contrasting markedly with the tongues of others under different treatment. The eruption of the rash was delayed in four of the cases, and in all there was a relatively prolonged pyrexia. Convalescence was in all five cases more tardy than usual, and desquamation much more profuse. In general the symptoms "seemed to indicate an undue retention of morbid products rather than that speedy and complete destruction of the infective poison which the advocates of this treatment claim as one of its special advantages."

**Bacillus Orthobutylicus.**—This is an anaerobic microbe isolated by L. Grimbart, occurring in the form of a movable, cylindrical rod, rounded at the extremities and measuring from 8  $\mu$  to 6  $\mu$  in length by 1.5  $\mu$  in breadth. When young, however, it is shaped like the clapper of a bell. The older organisms form spores, two or three in number, and their movements then cease. The spores resist the temperature of 100° for one minute and of 80° for ten minutes. The bacilli are capable of inducing fermentation in glycerin, mannite, glucose and invert sugar, saccharose, maltose, lactose, galactose, arabinose, starch, dextrin, and inulin, but they are without action on trehalose, erythrite, or calcium lactate and tartrate. The products of the fermentative process are normal butyric alcohol; butyric, acetic, and carbonic acids; and hydrogen. The *B. orthobutylicus* differs from the *B. butyricus* of Pasteur and the *B. amylobacter* of Van Tieghem in not affecting calcium lactate or cellulose, nor is it colored blue by iodine at any period of its development. From the *B. butylicus* of Fitz it is distinguished by its property of fermenting lactose and starch, and its inability to invert saccharose. Lastly its power of forming normal butyric alcohol from various carbohydrates clearly distinguishes it from the *B. amylozyme* of Perdriz. This new organism is said to secrete a diastasic substance analogous to the amylase which transforms amylose bodies into maltose and dextrin, but the latter is also converted into maltose, by the action of the bacillus, so that it cannot be identified during fermentation. Inulin is decomposed by it without undergoing saccharification; the glucose of invert sugar disappears first, the laevulose offering greater resistance; saccharose ferments without inversion, in a similar manner to maltose and lactose; glycerin, besides acetic and butyric acids and butyric alcohol, yields a small quantity of a left-handed lactic acid; and galactose, arabinose, and mannite be-



have like glucose, except as regards the relation between the products formed. Grimbert shows, however, that various factors—the nature of the medium and the manner in which it is decomposed, the duration of the fermentative process, the age of the bacilli, and the extent of their acquired habits—may modify the chemical action of the microbes. He suggests accordingly, that the contradictory results obtained at times by bacteriologists may possibly be attributable to similar apparently minor points, which he has proved in his present work to be factors of considerable importance (*Journ. de Pharm. et de chimie*, [5], xxix., 281).

**Brown-Sequard's Elixir.**—Wood and Whiting give the results of experiments with the use of orchitic fluid obtained direct from the Paris laboratory in the London *Lancet*. In twenty-three cases of chronic nervous disease one only showed any improvement in physical condition during this course of treatment, and the cause of this improvement must be looked upon as open to considerable question.

## Miscellaneous Formulas.

### CEMENT FOR MICROSCOPICAL PREPARATIONS.

[*Boll. Chim. Farm.*]

	Parts.
Resin .....	70
Yellow wax .....	25
Turpentine .....	5

### ANTIRACHITIC POWDER.

[*Boll. Chim. Farm.*, March 15, 1894.]

	Parts.
Precipitated carbonate of calcium .....	32
Phosphate of calcium .....	15
Lactate of iron .....	3
Sugar of milk .....	50

### SOLUTION OF IRON AND ARSENIC.

[*Boll. Chim. Farm.*, March 15, 1894.]

	Parts.
Ferro tartrate of potassium .....	10
Fowler's solution .....	100
Distilled water .....	90

### OBTUNDENT FOR SENSITIVE DENTINE.

[C. N. PIERCE.—*Ohio Dental Journal*.]

Cocain .....	gr. v
Carbolic acid .....	grs. xx
Chloroform .....	3 ss
Muriatic acid .....	℥. x
Alcohol .....	3 ii

### LOCAL ANÆSTHETIC FOR PAINLESS EXTRACTION OF TEETH.

[Dr. J. ALBERTO DEL SOLAR.—*Dental Cosmos*]

Alcohol, 98 per cent. ....	℥. iij
Chloroform .....	℥. iv
Ether, sulf. ....	℥. iss
Camphor .....	℥. M

The solution thus made is to be applied to the gum for one minute, both buccally and lingually. It is not intended for hypodermic use, and to secure the best result the gum should be carefully dried before making the application.

### EXALGIN FOR HYPODERMIC INJECTION.

[*Boll. Chim. Farm.*, 1894, 69].

P. Cesaris states that exalgin is readily dissolved by a solution of sodium salicylate, and he gives the following formula for the purpose:

Exalgin .....	1.0 part
Sodium salicylate .....	1.1 parts
Distilled water .....	10.0 parts

### ANTISEPTIC LOTION FOR FISSURED NIPPLES.

[*La Sem. Med.*]

Glycerin .....	50 grammes (℥. viii)
Water (sterilized) .....	225 grammes (℥. vii)
Alcohol .....	25 grammes (℥. i)
Mercury bichloride, 0.5 centigrammes (gr. i to iss)	

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**The Keeley Cure.** H. W. R.—From this correspondent we are in receipt of a letter worded as follows:

"I take the liberty to inquire through your valuable journal the correctness of the following prescription of Dr. B. D. Evans given in the *Medical News* (the Keeley cure):

Auri et sodii chlor. ....	gr. xii
Strychnia nitrate. ....	gr. i
Atropia sulph. ....	gr. ʒ
Ammonia muriat. ....	gr. v
Aloin. ....	gr. i
Hydrastinin. ....	gr. ii
Ext. erythox. fl. ....	℥. i
Ext. cinchona fl. comp. ....	℥. i
Glycerin. ....	℥. i
Aqua destil. ....	℥. i

The salts give a precipitate in solution together. Should that be so, and is not the gold salt in excess as to dose? I would like to be enlightened on this manner."

The formula given above is that cited by Dr. Evans as given by Dr. Chauncey F. Chapman in the *Chicago Medical Recorder* of February, 1893, and republished in the *Medical News* of March 4, 1893. The article of Dr. Evans appeared in the *News* of May 6, 1893.

It would be difficult to avoid precipitation in a mixture of the above composition. It is more than probable that the gold salt is absent from the preparation as prepared at the "Keeley Institute." In the quoted formula the dose of gold, providing the mixture be administered in quantities not to exceed a teaspoonful, is not excessive, though dangerously near the limit.

**Furniture Polish.** M. W.—We give below a formula for a furniture polish which has been recently patented in Germany:

	Parts.
Resin of guaiac. ....	125
Gum benzoin. ....	125
Shellac. ....	30
Linseed oil. ....	150
Benzin. ....	30
Alcohol or wood spirit. ....	3,000

Mix and dissolve.

The polish is applied with a sponge or brush, and the object is let stand for a half hour. A linen cloth moistened with oil is then used as a rubber and a brilliant polish is obtained which is said to be very lasting and is unaffected by water or any substances which usually injure varnish.

**Furniture Oil.** M. W.—This is much simpler in composition, the following being types:

	Av. ounces.
Linseed oil .....	3 3/4
Alcohol .....	8
Dilute acetic acid. ....	8
Butter of antimony. ....	2
Oil of turpentine .....	8

Shake well before using and apply with a woolen rubber.

Oil of turpentine .....	16 fl. ounces
Oil of amber. ....	16 fl. ounces
Olive oil .....	16 fl. ounces
Oil of lavender .....	1 fl. ounces
Tincture of alcanet. ....	4 fl. drachms

A cotton rubber is saturated with this polish which is thus applied to the wood. The latter is then well rubbed with soft dry cotton rags and wiped dry.

**Paraphenylenediamin Hair Dye.** L. E. R.—This is a two solution hair dye the manufacture of which is protected in Germany by patent rights. The particulars of its application are as follows:

A solution composed of

Paraphenylenediamin. ....	20 parts
Caustic soda. ....	14 parts
Water .....	1,000 parts

is applied to the hair after all fatty matter has been removed by previous washing with an alkaline solution. The application of the paraphenylenediamin solution is followed by a wash consisting of:

Hydrogen dioxide. ....	3 parts
Water .....	100 parts

In the course of the day the hair assumes a dark color, which deepens in hue to a blue black upon a further application of the dye. If a brown color is desired it is recommended to use a 5 per cent. solution of hydroxide of iron in place of the peroxide of hydrogen.

**Elixir Paracelsus.** P. Q.—This preparation is one of the antiquities of pharmacy. Compound tincture of aloes is now usually sold for it.

**Discolored Tincture of Rhubarb.** J. H. W. writes: "R. E. L. wishes to know how to clarify some tincture of rhubarb which has become discolored or black by having been kept in a can for about six months. He can clarify it as follows: To forty parts of the discolored tincture add one part of new milk, shake thoroughly, let stand about a day, and draw off or decant. A little at the last end will need filtering."

**Cements.**—I. B. requests formulas for cements for wood and metal, also for stone and metal.

An excellent cement for uniting articles of wood with metal may be obtained by dissolving glue in boiling water, and making it of the same consistence as that of cabinetmaker's glue; then add, while stirring, a sufficient quantity of wood ashes as to produce a varnish like mixture. While hot the surfaces to be united must be covered or coated with this glue compound, and pressed together.

Metals may be united to stone by applying a cement composed of plaster of paris and iron filings (1 to 6) mixed with water.

**Prescription Query.**—F. W. writes: "The following prescription makes a clear solution:

Sodi salicylat. ....	℥. i
Resorcin. ....	℥. i
Alcohol. ....	℥. i
Aque. ....	℥. iv

But this one gives a thick paste:

Acid salicylic. ....	℥. i
Resorcin. ....	℥. i
Alcohol. ....	℥. i
Aque. ....	℥. iv

Please inform me why a clear solution does not result from the second formula."

Because the salicylic acid is thrown out of alcoholic solution on the addition of the water. The salicylate of soda of the first formula is soluble in water, hence a clear solution results.

**Liquid Bluing.** J. H. T.—Oxalic acid is commonly employed as a solvent of Prussian blue. See answer to C. T. D. in April 12 issue.

**Booth's Hydrostatic Bottle Filler.**—C. A. P. writes:—"Can you inform me where Booth's Hydrostatic Bottle Filler can be obtained? At one time it was sold by Ryerson & Co., New York City, but a letter to them received no answer."

We are unable to place either the manufacturers or the selling agents of the filler named. Perhaps some of our readers will oblige us with the information.



## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

## Answers to Questions; Third Series.

31. An atom is the smallest particle of elementary matter and is indivisible and unalterable. A molecule is an aggregation of atoms forming the smallest portion of matter capable of subsisting alone, and having all the properties of the whole mass. Anything that occupies space is matter and any quantity of matter however small is a mass. Mass may also be defined as the actual quantity of matter contained in a body.

32. For reference and comparison the chemist has attached values to the elements to indicate the proportion in which they enter into combination. The atom of hydrogen is assumed as unity, and the atom of an element which can take its place in a compound is of the same value, and is called a monad. If an element can replace two atoms of H., it is a dyad, and, if three, a triad.

33. A chemical change involves a rearrangement of the atoms within the molecule resulting in a permanent alteration of the identity of the substance, as when water is converted into two gases, hydrogen and oxygen, either by electrolysis or otherwise.

A physical change involves merely a change of form or condition, the substance in its original condition being recoverable; as when ice is melted into water and then evaporated into steam.

34. Oxygen. It may be obtained by decomposing some of its numerous compounds, generally potassium chlorate, by the aid of heat, and the addition of a third body, such as oxide of manganese, to lessen the rapidity and violence of the chemical change. The  $MnO_2$  undergoes no change and the products are, the element oxygen and potassium chloride.

Recent investigations indicate that ozone,  $O_3$ , is also produced.

35. Combustion is an energetic chemical action attended with light and heat. Two substances are required, the combustible and the supporter of combustion. The most common form of combustion is oxidation and this is what is most generally termed combustion.

36. Atomic weight is the smallest weight of any element that can enter into the formation of a compound, and is usually expressed by hydrogen units.

Molecular weight is the sum of the weight of the constituent atoms of a molecule.

37. Chemical symbols are a kind of shorthand, for the names of different elements. They consist of a capital or a capital and one small letter which stands for the name of the element. They represent one atom of the element, the constant weight of the element—the atomic or combining weight, also represent single and equal volumes of gaseous elements. A chemical formula is a collection of symbols representing one molecule, it indicates at a glance the names of the elements in a molecule, its symbol or symbols, together with a small figure attached to the foot of any symbol showing how many atoms in the molecule, also stands for the constant weight—the molecular weight, and represents two volumes of the substance if volatilizable in the state of gas or vapor and the number of volumes of gaseous elements from which two volumes of any compound were obtained.

38. Dalton's hypothesis is—that matter is not infinitely divisible, but composed of minute particles or atoms having an invariable character, and on this hypothesis he based the law that whenever two elements combine in more than one proportion the several compounds formed contain simple multiples of the atomic weight of the elements.

39. Avogadro's law is that equal volumes of all gases under like conditions of temperature and pressure contain equal numbers of molecules. This is also known as Ampere's law.

40. An amorphous body is one which has no definite form, breaks irregularly according to no fixed planes of cleavage, and transmits light (if transparent) equally in all directions.

41. One pound absolute acetic acid will make 16½ lbs. dilute acetic acid U. S. P.

42. Ingredients entering into compound licorice powder of the U. S. P. are senna, glycyrrhiza, washed sulphur, oil of fennel and sugar.

43. A fluid ounce of water at its point of greatest density ( $4^\circ C.$ ) in vacuo weighs 455.892 grs. The figure taken for ordinary temperature and pressure is 455.7 grs.

$$\begin{array}{r} 44. \quad \begin{array}{r} 16 \\ 12 \\ \hline 4 \end{array} + \begin{array}{r} 12 \\ 10 \\ \hline 2 \end{array} = 6 \frac{16}{10} \end{array}$$

$$\begin{array}{r} 2\frac{3}{4} \quad 2\frac{3}{4} \quad 2\frac{3}{4} \\ 10\frac{3}{4} \quad 5\frac{3}{4} \\ \hline \end{array}$$

$$\text{Answer. } \begin{array}{l} 10\frac{3}{4} \text{ oz. of } 10 \text{ per cent. jalap} \\ 5\frac{3}{4} \text{ oz. of } 16 \text{ per cent. jalap} \end{array}$$

$$16 \text{ oz. of } 12 \text{ per cent. jalap}$$

$$45. \quad 4^\circ C \times 9 = 36; 36 + 32 = 68^\circ F. \text{ or } 7.2; 7.2 + 32 = 39.2^\circ F.$$

## Questions; Sixth Series.

## PHARMACOLOGY AND THERAPEUTICS.

References: The Dispensatories and general works on Pharmacology and Therapeutics.

[The fifth series of questions published last week should have been numbered from 61 to 70 instead of from 1 to 10. This, the sixth series, will be numbered as though the error had not occurred. Editor Quiz Box.]

71. Name three important nervous sedatives, giving the main points of difference in their mode of action.

72. Name three nervous stimulants suitable for use as physiological antidotes to the above.

73. Name a mydriatic and state the manner in which it is generally exhibited.

74. Name a styptic in frequent use.

75. Name a diaphoretic or diaphoretic combination in common use.

76. Name two antipyretics.

77. Name a frequently used official expectorant galenical.

78. Name an emetic that may be administered hypodermically.

79. Name a powerful sudorific.

80. Name a hydragogue cathartic.

## Names of Students whose grade stood 75 on Questions 31 to 45.

W. J. Adams, Manchester, Va. Harry Acamand, Quakertown, Pa.

E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. Wm. L. Becker, Dubuque, Iowa. Heywood Boone, Clinton, Ky. John W. Brewer, Lake Preston, S. D. W. E. Bruce, Boston, Mass. J. C. Boyer, Wisconsin, Pa. Frank J. Blauton, Niagara Falls, N. Y. T. M. Broodus, Gordonville, Va. William Brown, New York City.

Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Lester Carde, Woonsocket, R. I. Henry E. Culbert, Newark, N. J. Chas. S. Clark, Shamokin, Pa. Chas. S. Cogley, Lowell, Mass. W. P. Craig, Indianola, Miss. Chas. L. Chapple, Minneapolis, Minn. W. S. Collin, Mitchell, S. Dak.

A. P. Davis, Redwood Falls, Minn. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp, Mount Morris, N. Y. F. J. Dewberry, Centerville, Tenn.

L. Fickler, New York City.

John J. Grogan, Warren, Mass. William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn. A. Gates, Toledo, Ohio.

L. Harding, Fergus Falls, Minn. Frank Hartmann, Middletown, Conn. H. B. Harrop, Columbus, O. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. H. Heinzel, West Superior, Wis. F. G. Hill, New York City. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

Wm. L. Knuth, Springfield, Ohio. Frank W. Krehbiel, Dayton, O.

J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. C. W. Linch, Lewisburg, Pa. M. D. Lingler, Philadelphia, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavalie, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. T. L. Mills, Boston, Mass. Arthur Mourel, Houghton, Mich. Thomas J. Murphy, East Bradley, Pa. John R. Murray, Centerville, Tenn.

W. B. Nethery, Toronto Junction, Ont. Ralph

L. Nye, Skowhegan, Me. Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.

T. J. Quirin, Santa Clara, Cal.

A. V. Rand, Wolfville, N. S. M. E. Read, Wau-

seon, Ohio. Paul F. A. Rudinek, Chicago, Ill.

C. D. Sauvnet, New Orleans, La. Clinton Sellers,

Kencordino, Ontario. Wm. E. H. Schneider, New

York City. Edgar B. Scott, Norfolk, Va. William

W. Scott, Highland Falls, N. Y. L. W. Simonds,

Providence, R. I. Alber Z. Smith, Clarkburg, W.

Va. Clarence D. Snavely, Lebanon, Pa. Moses

W. Somers, Boston, Mass. A. W. Walter Spingler,

Toronto, Ont. Dan G. Sullivan, Hooke, Mass.

Walker L. Stephens, Philadelphia. J. McDonald

Scott, Chicago, Ill. S. M. T., St. Peter's Hospital,

Albany. W. E. Sniwel, Parsons, Pa.

Lou Taylor, Greenfield, N. W. T. Howard B.

Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk,

Va. Miss Edith Tompkins, Jasper, Fla. Clyde W.

Townsend, Chicago, Ill.

W. H. Van Surander, Winsted, Conn. Chas. G.

Vernon, Florida, N. Y.

M. D. Martin, Redwood Falls, Minn.

Bertie Ward, Orange, N. J. Miss Emma A.

Wiggin, Exeter, N. H. Wood Wiles, Bloomington,

Ind. John S. Wilson, Philadelphia, Pa. H. A.

Woodward, Plainfield, N. J. Frank M. Wayne,

Rochester, N. Y.

Seth Talcott, one of the oldest and most successful druggists of Hartford, Conn., and senior member of the firm of Talcott, Frisbie & Co., died in that city on April 17. Mr. Talcott was born at the old family homestead in West Hartford about sixty-three years ago. He began the drug business with Harvey Seymour and afterward bought out the business. In 1883, when Edward C. Frisbie was admitted into the partnership, the style of the firm became Talcott, Frisbie & Co.

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record.*

### THE BUSINESS-BRINGING VALUE OF BREVITY AND ONE-POINTED- NESS.

BY NATH'L C. FOWLER, JR.

The editor of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD has requested me to furnish a series of articles on successful publicity. I am not an advertising agent, neither place advertising nor receive commission, my business-profession being exclusively that of preach-

## JOHN SMITH,

Dealer in

Drugs, Chemicals, Patent Medicines,  
Brushes, Nursing Bottles, Hot Water  
Bottles, Sterilizers, Tooth Brushes, Glass,  
Cologne, Perfumes, Toilet Powder,  
Buggies, Wagons, Carriages, Boots, Shoes,  
Rubbers, Watches, Clocks, Silverware,  
Jewelry, Every Variety of Dry Goods,  
Chamber Sets, Parlor Suits, Rattan Chairs,  
Pipes, Cigars and Tobacco, Electric Fix-  
tures and Lamps and Books.

## JOHN SMITH,

44 SMITHVILLE AVE., SMITHVILLE.

*NOTE.*—Cottage house, half mile from depot, ten rooms and bath, stable connected, 15,000 ft. of land, for sale cheap.

*Specimen of how not to do it.*

ing and practicing the trade-bringing doctrine of the successful presentation of every line of trade, from the people's standpoint, for the people are the buyers, and from the people comes business.

What the people want, not what the merchant wants, is what the seller must give the buyer, annihilating his own ideas, so far as they conflict with general public opinion. I shall attempt to concentrate the argument of each article into and around one distinct and vital point, leaving all other subjects, and even those that are branches of the subject I am attempting to illustrate, for special treatment in future articles.

#### CONGLOMERATION UNPROFITABLE.

Conglomeration is the thief of profitable advertising. Ninety-nine per cent. of all advertisers say too much in their announcements, using from two to ninety-nine times too many words in telling their stories.

A great percentage of the members of the public believe that advertising does not affect them, and with that feeling

always before them they pretend not to read advertisements, and they certainly do not read the advertisement that is a dry assortment of articles for sale, so mixed up that the advertiser himself can hardly tell what he is announcing. The advertisement that tells is the advertisement which, in whole or in part can be absorbed at a single glance, and which contains one word, or one sentence, either well describing or presenting the goods, or suggesting in the most emphatic way that the reader continue his reading through the descriptive matter.

A successful advertisement is generally of two parts, the heading or headlines with the description or argument following.

The heading of every advertisement, particularly if the advertising space be limited, must be so short, and contain so few words, that it can be easily read at a considerable distance, and cannot escape the eye glancing over the page, no matter how many advertisements, or how much interesting reading matter, may be upon that page.

Fortunate, indeed, is the man who can invent one word for a heading, for one word is better than two, and two are better than three. A heading of more than five words, unless the space containing the advertisement is very large is generally ineffective, at any rate much more ineffective than a heading containing less words.

Better have the majority of readers read a short advertisement than to have few readers read the whole of a long advertisement.

The matter simplifies itself into whether you will reach a large number of people with a short argument, or a few people with a long one.

If you could frame a bill and have it become a law that people are obliged to read your advertisement, then you might print a catalogue of your goods in the papers, and make money doing so, but so long as they will not wade through a lengthy advertisement, you must give them just as much as they will read, no more, no less.

#### HOW NOT TO DO IT.

For example, let me assume that a certain concern advertises in the same advertisement paregoric, hats, nails, books, molasses, window glass, easy chairs, blankets, meerschaum pipes, roses, paint, house lots, watches, putty, and electric bells. Of course, no one concern would carry all these lines, but they illustrate the principle, and they all represent articles in demand.

The buyer may be in need of all of them, but the chances are that he needs one thing more than he needs the others. If he is looking for one article he is not likely to see that article in a catalogued conglomeration.

If only one of these articles is advertised at a time, any one seeing the advertisement and wanting the article advertised, is liable to go to the store to buy it, and it is by no means improbable that such a buyer may not be a regular customer of that store, and by going there to buy what seems to him to be a specialty he becomes a transient, and perhaps a regular customer.

He who wants a certain thing naturally notices the advertisement that presents that thing to the exclusion of other things, and feels that the advertiser is making a special effort to sell that article, which indicates that he is selling it for less than regular price, or that he has a superior article at the regular price.

#### ONE AT A TIME.

There is no objection to enumerating the articles you sell at the bottom of the advertisement in small type, but an advertisement should seldom present conspicuously more than one article, or two articles at the most, at the same time in the same advertisement. Whenever it is necessary to present more than two, better divide the advertisement up into distinct sections, each one complete in itself and each one devoted to some particular line.

The advertisement should leave something for the salesman to say. It is simply the forerunner, that which brings a person to the store, where the quality of the goods and the quality of the salesman must close the business. The advertisement has no more right to do the work of the salesman than has the salesman a right to stand in the street repeating the advertisement to passers-by who will not listen.

Advertising will not sell goods. That is the salesman's business. The merchant

## WANT A

## BRUSH

*We sell as low as  
we can—lower than  
ever before.  
We have too many.  
We are after cash.*

JOHN SMITH, 44 Smithville Ave.

*Specimen of how to do it.*

should confine the salesmen to their business and the advertising to its business.

There are times when it is necessary to advertise a line of goods, but generally one kind of that line may be brought out conspicuously, followed by a description of the rest of the line, but in this case the description of the other things should be as brief as possible, and occupy not exceeding one-fourth of the advertisement.

#### CHOICE OF TYPE.

Never use fancy or script type in an advertisement. An advertisement is not a work of art. Newspapers are poorly printed, and newspaper type is inartistic. There is nothing like Gothic in full face letters for an advertisement; they are easily read, and don't occupy more space than they deserve.

You have something to say. Say it as you would in a telegram. Put your strong words first, and almost as strong words last, and fill in between with the smallest number of words to give people an idea of your meaning.

Don't tell them too much; let them use their own intelligence; let them argue among themselves the advantages of your goods. Make it so they will be surprised when they see the goods.

A description of any article of manufacture, or of any spot of Nature, which exceeds the real thing prevents people from appreciating it to its full advantage.

A description should be strong, and yet it should leave room for the imagination to work, and should often underestimate slightly, that the buyer may find something beyond what he anticipated.

I present two examples of advertisement setting. One represents the average newspaper advertisement. The other presents but one article, in the briefest manner, and in such a way that it should attract attention.

### College Commencements.

#### NEW YORK COLLEGE.

The annual commencement exercises were held at Carnegie Music Hall last night, April 25.

As is always the case the hall was filled with the friends of the college and of the graduating class, and the exercises were interspersed with appropriate music from the Seventh Regiment band. The credit for the arrangement of the excellent programme is due to the committee of arrangements composed of H. W. Atwood, W. M. Massey and T. J. Macmahon.

The exercises were opened with prayer by the Rev. Joseph M. Hodson, after which President Fairchild delivered an address. Secretary Hegeman then read the roll of graduates, and President Fairchild formally conferred the degree of graduate in pharmacy upon them.

Rev. John W. Brown, rector of St. Thomas', delivered an address to the graduating class, and Prof. Chas. F. Chandler read the roll of honor.

President Fairchild awarded the special college prizes.

President Herman Graesser of the Alumni Association awarded the prizes offered by that association, which concluded the formal ceremonial. Following this the many flowers which had been sent in by the friends of the class were distributed to their respective recipients.

The roll of graduates by States is as follows:

Asia Minor.—Harootin K. Hintalian.  
Connecticut.—Morris Ernest Kilborn, Loveland;  
Otto C. Marx, New Haven; Charles O. Grube, Windsor Locks.  
Delaware.—Benjamin F. Williams, Haslettsville,  
Iowa.—Gustav H. Ankersen, Carl A. Meisner, Davenport.

Maine.—John P. Hutchinson, Eastport; Ernest Jordan, Auburn.

Massachusetts.—Samuel Cohn, Boston.

Michigan.—August Wm. Brater, Saginaw.

New Jersey.—William Gerard, Dover; Carl L. Richter, Fort Lee; Nelson S. Kirk, Frederick Wm. Linnig, Jr., Hoboken; Albert E. Davis, Peter J. Ehrsgott, Cornelius G. Kay; Ferdinand N. Sauer, Jersey City; George Lewis Johnson, Madison; James Kaveny, Montclair; Harry W. Crooks, Joseph Kusy, Frank W. Maring, Newark; Charles L. Van Nuis, New Brunswick; Charles Henry Roberts, New Monmouth; Frank J. Keller, Paterson; John Dumont Cass, Somerville; Emil A. T. Schlichting.

New York.—Max Arthur Auerbach, W. Arthur Bastedo, William Boehme, William L. Clarke, Tunis F. Cook, Moses Cowen, Thomas M. Davies, Fred W. Drenckhahn, Frank E. Eely, Philip Eichler, Ludwig C. Erb, Meyer Frankel, Isadore Friedl, John G. Eichler, Leo W. Geisler, Jr., Conrad Glogau, Emil Imhof, Moses Katz, Henry J. Kirchner, William Kirkpatrick, Jr., Henry Kreuder, Felix Krumbholz, Julius Mackiewicz, Louis Marcus, Charles Miller, Samuel Morris, Charles F. J. Muhl, Bernhard Muller, Robert Farquhar Murison, Otto Neubert, Oscar J. Ruzicka, Louis W. Schulze, Peter Siegrist, Charles R. Siemann, James J. Skelly, Jr., Edwin G. Stiebeling, Frederick Stock, Charles H. A. Stoerzer, Jr., Frank Henry Struck, George Sydney Tomlinson, Louis B. Wade, Abraham Weiss, Charles Theo. Wolff, J. Henry Wurthmann, Auburn.—George R. Sagar, Brooklyn.—Gustav

Abbehusen, Harry Clinton Anness, Henry G. Born, Sarah Saunders Emory, Hieronimus A. Herold, Fred P. Hiltz, John Ketterle, Jr., Walter Koennemann, Jacob J. Lauffer, William O. Luttman, John Novarine, Frederick C. A. Schaefer, Robert M. Ullrich, Oscar Irving Van Tassel, John Paul Wilcox, George Francis Burger, Bedford Park; Oscar B. Chapman, Cassville; George Hall, Cornwall; Frank J. Herbig, College Point; Eugene Watson Myers, Catskill; George Frank Holland, Anthony H. Mulina, Joseph R. Wood, Flushing; George W. Simrell, Fort Hamilton; Joseph W. Bingham, Glens Falls; Henry Warner Johnson, Hudson; Franklin G. Hills, Havana; F. Wesley McCullough, Hammond; August H. Bresloff, Joseph T. Munk, Long Island City; Frederic T. Lewis, Martville; Charles B. Prior, Harry Terhune, William Clifford Youngs, Middletown; William H. Clinton, Jr., Peekskill; Frank Lewis Wilcox, Port Jervis; Mark De W. Benjamin, Riverhead; Ralph William Shaul, Richfield Springs; Mortimer W. Sargeant, Woodbury Falls; Clarence W. Race, Seneca Falls.

Nova Scotia.—Edgar B. Dawson, Pictou.

Ohio.—George Phelps, Dayton.

Pennsylvania.—Peter F. Lalley, Rendham; John J. Kelly, Scranton.

Rhode Island.—J. Stewart Faulkner, Providence.

Utah.—Albert Horne, Salt Lake City.

Norway.—George Carson Froich, Christiana.

Canada.—Frank Nelson Pond, Toronto.

#### BROOKLYN COLLEGE.

The hall of the Young Men's Christian Association, Brooklyn, was filled with the guests of the college on Thursday evening, April 20. The stage was elaborately decorated and an orchestra furnished appropriate music.

Professor Elias H. Bartley, B.S., M.D., the dean of the college, conferred the degrees upon the following members of the graduating class and presented the diplomas and certificates in brief but well chosen phrases: Mabel N. Buckman, Henry M. Burtis, Amandus B. E. Engstrand, Thomas F. E. Fagan, Henry Foerster, Charles F. Grant, William F. J. Happ, Matthew Kramer, Simon Lipshitz, Louis A. Olney, Henry W. Schwane, J. Eugene Toye, Augustus C. Senne, Joseph J. Vetter, Jr.; George M. Wallhanser, William J. Wilson, Stephen L. Wood, Edward Fuehrer, Arthur C. Reinhold, Herman Zuelch.

On account of being minors only certificates of proficiency were awarded to Arnold W. N. Brandenburg, Charles F. Cole, Mary E. S. Dickson, Gottlieb P. Essig, Otto E. Lange, William P. Thompson, Benjamin H. Voelbel and Stanley R. Woodruff.

Diplomas were also presented to Edward Fuehrer, Arthur C. Reinhold, Augustus C. Senne and Herman Zuelch, members of the class of '93, who received certificates only upon their graduation last year.

The valedictory oration was delivered by William G. Wilson.

Rev. Dr. Chas. C. Hall delivered an address to the class.

Dr. Wm. C. Anderson, president of the Alumni, presented the alumni prize, a high power microscope to J. J. Vetter.

#### New York.

The disappearance of James H. Parke, the son of Hervey C. Parke, president of the widely known firm of Parke, Davis & Co., Detroit, from his place of business in the New York branch office, to which reference was made in these columns a week ago, still remains a mystery, and not a trace of his whereabouts has been discovered. John Clay, well known to pharmacognosists as an expert judge of vegetable drugs, is the manager of the New York branch. When a representative of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD called at his office in Maiden lane he found a line of reporters waiting for an opportunity to interview Mr. Clay on the disappearance of young Parke. Many of the newspaper men were enterprising enough to write up imaginary reports of interviews, which varied of

course according to the originality of mind of the reporter.

The facts as told by Mr. Clay are as follows:

James H. Parke, a young man twenty-six years old, the son of Hervey C. Parke, president of Parke, Davis & Co., has been employed in their New York branch office for some three years past. He was a young man of irreproachable character, and to Mr. Clay's positive knowledge had no vicious habits and no vile companionships. His circle of acquaintance was but small, but his kindly disposition endeared him to all with whom he came in contact. On Thursday afternoon, the 12th inst., at as nearly as can be made out, between three and four o'clock, he left the office. Since that time no trace whatever of his whereabouts has been obtained. Every effort through private sources and by the aid of the police has been put forth night and day since his disappearance has been known; but up to this moment absolutely no trace whatever of him has been found.

Alexander Hudnut, Herald Building, 218 Broadway, or to speak correctly the corporation doing business under his name, has taken a ten years lease of the building at the corner of Fulton street and Broadway, adjoining the *Mail and Express* offices, and will make extensive alterations and improvements with the object of converting it into a modern pharmacy. The chief officers of the Alexander Hudnut Corporation are F. F. Van Ness and George Bancroft. Mr. Bancroft is the active partner and manager of the corporation.

The firm of Bell, Pollitz & Co., importers of drugs and mineral waters, Platt street, this city, is in the hands of a receiver as the result of an action brought by the junior partner against Harry W. Bell, the senior. The latter, it is claimed, has overdrawn his account, and threatens to dispose of the firm's stock at ruinous prices and also to make unprofitable contracts.

The *Mamatsblatt des New Yorker Deutschen Apotheker-Vereins* is the name of the new monthly pharmaceutical journal which the German Apothecaries' Society of New York are to publish on May 1. The publication committee of the new journal is composed of E. C. Goetting, V. Kostka and Dr. Mettenheimer.

### Notes on Prices.

#### Morphine Lower.

Rosegarten & Sons, Philadelphia, under date April 18, announce reduced prices for acetate, muriate and sulphate of morphine, by 25 ounces or more, as follows:

\$2.40 per ounce, including  $\frac{1}{4}$  oz. vials in 1 oz. boxes; \$2.35  $\frac{1}{4}$  oz. vials in  $\frac{1}{4}$  oz. boxes; \$2.15 1 oz. vials, and \$2.10 in bulk.

#### Paris Green Prices.

The paris green combination have agreed upon the following scale of prices, which is subject to change without notice:

In arsenic kegs or casks.....cents 20  
Kegs, 100 to 175 lbs.....20½  
24, 28 and 56 lbs., iron cans or bxs., net weight..22  
2 to 5 lb. paper boxes.....22½  
1 lb. paper boxes.....23½  
½ lb. paper boxes.....24½  
¼ lb. paper boxes.....26½

One to 5 lb. tin boxes put up to order at an advance of ¼c. per lb. over paper boxes of similar sizes.

TERMS.—Payable July 1, 1894. Discount, 6 per cent. per annum for unexpired time.

REBATES.—To purchasers of 10,000 lb. or over, during the season, 3 cents per lb.; 4,000 @ 10,000 lb., 2½; 2,000 @ 4,000 lb., 2; 1,000 @ 2,000 lb., 1½; 500 @ 1,000 lb., 1.

## Review of the Wholesale Market.

New York, April 25, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The past week has developed no material increase in the volume of business transacted in the several departments of drugs, dyestuffs and chemicals. With an almost entire absence of speculative demand the market is flat and depressed. The price fluctuations have tended as a rule toward lower values without, however, increasing the general distribution, round parcels being almost wholly neglected. Opium has marked a further decline. Quinine has remained quiet and featureless. Refined camphor has declined. HGH peppermint is showing a steadier tendency and is likely to advance.

### ADVANCED.

Cascarilla bark  
Chicle  
Coriander seed  
Nitrate of soda  
Lycopodium

### DECLINED.

Citric acid  
Morphine  
Opium  
Short buchu leaves  
Snake root  
Tonka beans  
Refined camphor

ARNICA FLOWERS are held steadily at the previous range of 11 @ 12c., though for fancy grades some in the trade are asking in advance upon the outside price.

BALSAM COPAIBA is meeting with a moderate consumptive demand at prices within the quoted range.

BALSAM FIR, Canada, has remained quiet but firm at \$3.50 @ \$3.70.

BALSAM PERU does not offer below \$1.75. The supply is growing less and prices are steady.

BALSAM TOLU is firmer and we hear of none offering from importers below 25c. and only small parcels can be obtained at these figures.

BARKS generally are quiet. Cascarilla is scarce and wanted; the phenomenal price is 7c. Recent sales of soap aggregate 2,000 lbs., for which 3½c. was accepted.

BUCHU LEAVES, short, are inquired for to a moderate extent and a fair business has been done at lower values. We quote 8 @ 9c. as to quality.

CACAO BUTTER continues quiet at the quoted range.

CHAMOMILE FLOWERS show no important variation. For German, new, we quote 17 @ 24c., and Roman 15 @ 18c.

COD LIVER OIL, Norwegian, has not shown any activity during the week, but prices are fairly well sustained at the previous range of, say, \$28 @ \$29.

CUBEB BERRIES continue in fair demand, and among other transactions we are reported sales of 3,000 lbs. XX on private terms; 16 @ 20c. is yet required in this market.

GUARANA is now obtainable in a jobbing way at 90 @ 95c.

JABORANDI LEAVES are in moderate request with the quotation steady at 17 @ 20c.

HYOSCYAMUS LEAVES are in steady fair request, and we are reported a sale of 1,000 lbs. at 11c.

LYCOPODIUM is developing a steady firm feeling, and prices seem to be tending upward. We do not hear of any outside marks offering below 53c.; for Politz 56c. and upward is asked.

MORPHINE has been reduced by the manufacturers 10c. per ounce, the quotations now being \$2.35 @ \$2.40 for eighths, \$2.15 for ounces and \$2.10 for bulk.

NAPHTHALINE BALLS do not improve in demand, notwithstanding the present low range of values; 3½c. is now quoted inside for quantities.

OPIUM has dropped a point or two during the interval and the future course of the market as to this article is very uncertain. There is little or no inquiry of either a legitimate or speculative character at the moment and important interest is altogether lacking. The fall in prices came as a surprise to many in the trade who had added to their stock when prices were higher in the belief that prices were on the upward move. The belief is gaining ground among many in the trade that the market has been for some time under manipulative influences; but whether this be the case or not the situation to-day is decidedly unsettled. Natural in cases is quoted \$2.20 @ \$2.25 and jobbing parcels nominal \$2.25 @ \$2.30. Powdered is quoted \$3.20 @ \$3.30 as to holder.

QUININE during the week has shown no action of consequence and the demand is not characterized by any display of spirit, small orders being the rule. From second hands foreign is offering at 23 @ 24c., but this price can be shaded down to 22½c. on firm bids for quantity lots. Manufacturers' prices remain steady at 25 @ 27½c.

SUGAR OF MILK, domestic, powdered, is meeting with moderate inquiry at the range of 7½ @ 10c. as to quality.

TONKA BEANS, Para and Surinam, are in better supply and offering freely at a slight concession. The former is quoted 30 @ 35c. and the latter 55 @ 65c.

### DYESTUFFS.

CUTCH continues to meet with a steady fair inquiry at 5½ @ 6c. for bales, and the market is well sustained at these figures.

GAMBIER does not improve in demand, but prices are steady at the previous range of, say, 4½ @ 4¾c. for store goods.

MADDER, Dutch, remains quiet with prices a shade easier; quoted at 10c.

NUTGALLS, Blue Aleppo, are selling in small quantities at the range of 13½ @ 14c.

SUMAC continues in steady, fair inquiry with Sicily firm at \$72.50 @ \$77.50 as to brand.

### CHEMICALS.

ACETATE OF LIME continues in fair, moderate inquiry with the sales of brown at 90 @ 95c. and gray at \$1.55 @ \$1.60.

ALUM is jobbing moderately with prices at the previous range of say, \$1.75 for lump and \$1.80 @ \$1.85 for ground.

ARSENIC, white, is in better supply and offers at 3½ @ 4c.

BLEACHING POWDER does not vary either in price or demand. German is held at 2½c. and English 2½c. as to quantity.

CHLORATE OF POTASH is quiet at 13½c. for German crystals and 13½c. for English. Powdered is jobbing at 14½c.

CITRIC ACID from manufacturers has declined during the interval and prices are steadily maintained upon the basis of 41½c. for bbls. and 42c. for kegs.

CREAM TARTAR continues to find a moderate jobbing outlet with the current sales at 17c. for crystals and 17½c. for powdered.

NITRATE OF SODA is in steady, fair inquiry with the current sales of spot goods at \$2.32½ @ \$2.35 as to quantity.

OXALIC ACID is meeting with a fair moderate inquiry, but prices are steadily maintained upon the basis of 6½ @ 6¾c. for German.

QUICKSILVER is generally held at 46½ @ 47c., which is a slight advance on previous prices.

TARTARIC ACID continues quiet though without quotable change in price.

### ESSENTIAL OILS.

ANISE remains quiet, but the market is steady with the current sales at \$1 42½ @ \$1.45.

CASSIA is still offering at 82½ @ 85c., though these figures are yet below the import range.

CLOVE is in fair seasonable demand with prices steady at the range of 50 @ 53c.

CITRONELLA, Fisher's, has risen a notch and is now quoted 70c.

PEPPERMINT, HGH, is in improved position with prices firm at \$2.90 @ \$3. Bulk does not vary from \$2.30 @ \$2.65.

SASSAFRAS, pure, is weak and neglected, the artificial product having replaced it to a great extent; some in the trade are offering the natural down to the point of 32c.

### GUMS.

ARABIC.—Sorts are in steady, moderate inquiry and we hear of numerous jobbing sales at the range of 9½ @ 10c.

ALOES, Curacao, has been in demand during the week, and we are reported sales of some 100 boxes at 3c.

CAMPHOR, Japanese, is now quoted uniform with domestic, 40 @ 41c. representing the range.

CHICLE is in better inquiry and quoted firmly at 26c., though it is thought that less would be accepted in some quarters on firm quantity bids.

ASAFETIDA continues selling in a small way at 15 @ 28c. as to quality.

SENEGAL, Trieste, picked, is reported sold to the extent of some 25 cases within the range of former quotations. We quote sorts at 9 @ 9½c.

SHELLAC continues in steady, fair inquiry, and the market is firmly sustained upon the basis of 35 @ 36c. for DC, 33 @ 34c. for VSO and 25 @ 26c. for TN. The market has a firm tone, and holders refer to the situation as favorable for a further appreciation in values.

TRAGACANTH is jobbing quite freely with no quotable change in price, the current sales being at 32 @ 36c. for Aleppo, and 75 @ 78c. for Turkey.

### ROOTS.

DANDELION, German, is yet held and selling at 8 @ 9c.

GINGER, Jamaica, unbleached, continues selling at 11 @ 14c. as to quality.

IPERCAC is meeting with about the usual inquiry, and we hear of numerous small sales at \$1.25 @ \$1.40.

JALAP is in better supply but dull with the range nominal at 20 @ 22c.

SARSAPARILLA, Mexican, continues very quiet with the range 8 @ 8½ as to quantity.

SENEGA is maintained at full 38½ @ 40c., and holders manifest no disposition to urge sales at a concession.

GOLDEN SEAL continues in moderate demand, with the current sales at 21 @ 22c.

RHUBARB has attracted some attention during the interval, and among other transactions we hear of a sale of 2,000 lbs. at 25c.

SNAKE, Texas, has continued very dull, and prices are lower, 32½c. being quoted in some instances.

### SEEDS.

ANISE has developed no action of consequence, and prices are steady at the previous range.

CANARY, Smyrna, continues in moderate jobbing inquiry at the range of 2½ @ 2¾c.; Sicily is held at 2½ @ 3c.

CARAWAY remains quiet at 6½ @ 6¾c. for Dutch.

CORIANDER is firmer and higher at 7½ @ 7¾c.

HEMP, Russian, is maintained at full 2½c., though no sales of consequence are reported.

MUSTARD, California, yellow, is jobbing fairly at full previous values, say 3½ @ 4c. Brown is steady at 3½ @ 3¾c.

RAPE, German, remains quiet at 2¾c.

## A Card from Mr. Canning.

Editor AMERICAN DRUGGIST:

Following is copy of a letter received from Mr. H. M. Whitney of Lawrence, Mass., which explains itself. Coming as it does from a pharmacist of national reputation, and one whose advice is eminently safe to follow, I deem it wise to publish the letter for the benefit of the druggists throughout the country who have not yet joined the League.

HENRY CANNING.

BOSTON, April 22, 1894.

LAWRENCE, Mass, April 19, 1894.

Henry Canning, Esq.,

Pres. Interstate Retail Druggist League,  
Boston, Mass.

MY DEAR CANNING:

Most human beings are, and properly should be, pleased and stimulated by success in all unselfish labors for their fellow craftsmen, and to me it has always seemed but simple justice to recognize meritorious acts and deeds of special service, by an expression of appreciation.

This is not only due and a help to one thus engaged, but is often a decided help to others, to join in such work, and an incentive to some to seek and take advantage of opportunities offered and had for the asking.

With such feelings I write to convey to you my appreciation of the work you and your associates have in hand. The annoyances and in many cases the sufferings as well as the general disgust of nearly every pharmacist at the present condition of our calling needs no comment. Many and varied have been the plans formulated for relief, but owing to want of harmony and united action all have thus far signally failed.

The conditions have become so demoralizing and so hazardous that proprietors, jobbers, and retailers are all apparently much disturbed by the possible outcome.

The plan or scheme of the I. R. D. L., which you represent, covers and combines the three interested parties in such a way as to secure co-operation and avoid antagonism. This is of itself a very strong point. Another, and perhaps a stronger point, is the necessity of local and permanent organization in the towns, cities, States and sections of the entire country.

No plan or scheme, I understand by your representation, as that the I. R. D. L. unfolds, covers so thoroughly, comes so near and is in such perfect accord with the general principles which govern and control our local, State and national government. With such a broad and comprehensive scheme, following in the lines of such a success as we all claim for our nation, how can any one hesitate to at once signify his allegiance, by signing this declaration of a union of our forces, and labor as one united army for the independence and just rights, formerly and properly accorded to the responsibilities and duties, of necessity assumed by us?

The enthusiasm which you and some others have and are putting into this work is surely bearing good fruit, for many who were despondent and discouraged have been roused and awakened to new life, vigor and action.

The local organizations thus far secured in this section are most assuredly elements of strength and encouragement, and if by any possible mishap, this grand national scheme of perfect and universal organization should be delayed or assume some different form or method, there surely is not a question as to the value of the work accomplished, for in this short time it has developed in many localities a power for

harmony and united action which will never be lost.

In your recent visit to a city of 50,000 people, where for ten years or more it has seemed impossible to do anything in the way of local organization, one of your assistants, in one day, so prepared the way by showing up the advantages of united work, that a meeting of the druggists, fairly well attended, was secured. Your words of explanation and counsel, aided perhaps by some others, resulted within forty-eight hours after your talk of half an hour in a complete and solid association embracing every druggist in that city and the three adjoining towns, thirty-eight in all, and the one dollar fee payable to the I. R. D. L., was paid in and forwarded to you, so that in less than three days from your visit the association was in good standing and working order. The officers are hard at work and all are enthusiastic and united. Surely, my dear Canning, you and those with you in this great timely and promising work have a right to feel proud and rejoice.

If these hastily written lines convey to you, as they are intended, my grateful appreciation of the work being done, and will in a small way help to hold up and encourage the effort, my purpose will have been accomplished.

Your friend,

[Signed] H. M. WHITNEY.

Boston.

House bill No. 87, which was printed in full in the Feb. 8 issue, has received an adverse report from the committee which considered it, but when the report came up for consideration in the House the bill was so ably championed by its friends that by a substantial vote the committee's rejection was negated. The bill will come up for further consideration in a few days; it has already been amended by adding at the end of section 1 the following:

"Provided, however, that any registered pharmacist may be considered the proper person to receive such a certificate when no complaints have been made against the applicant for such certificate, and when complaints are made they shall be in writing, specifying the reason, if any, why a certificate should be withheld."

The annual meeting of the Alumni Association, M. C. P., was held at the college building on the evening of April 12. Reports were received from the president, secretary and treasurer, all of which were accepted and placed on file. Amendments to the constitution were adopted which will tend to place the association upon a firmer financial basis, and an encouraging report was made concerning the volunteer subscription, which will also swell the exchequer. The class of '92 has taken the lead in the matter of purchasing cabinets for the college, and Mr. Carver of that class turned in a goodly sum of money which he had collected for this purpose. The twenty-fifth anniversary of the association occurs next year, and a committee is soon to be appointed to perfect arrangements for celebrating this event. An alumni journal is one of the probabilities of the future, and it is now thought that the paper will be established during the coming year.

These officers were elected: President, W. F. Craig of Lynn; vice-presidents, Frank H. Carver, F. L. Decker; secretary, Prof. W. L. Scoville; treasurer, J. A. Talby; auditor; J. G. Godding.

Massachusetts and her sister States are appreciative of the Low Art Tile Company apparatuses if the number of purchasers is any criterion. Bay State re-

tailers who have recently bought fountains from this firm are: J. R. Colby, Malden; S. F. Crafts, Beverly; J. J. McMannon, Lowell; H. F. Muser, Haverhill; J. E. Bryant, Wellesley; H. L. Green, Wenham; C. F. Ripley & Co., Taunton; Aaron Pratt, Brookline; W. W. Clough, Medway; L. R. Davis, Northampton; J. G. Norton, Cottage City, and J. E. Royce, Brockton. Other New Englanders who have patronized this firm are: M. C. Farr, Augusta, Me.; L. A. Page, Camden, Me.; N. G. Landon and A. Yost, both of Meriden, Conn.; Starr Bros., New London, Conn.; Lothrop & Pinkham, Dover, N. H.; Samuel Chesbro, Willimantic, Conn., and Fred. E. Lovell, Ph.G., Newport, N. H. That this firm's business is not confined to the N. E. States is emphasized by their sales elsewhere. Among their patrons we find: Flood & Ringley, Sandy Hill, N. Y.; B. C. Hough & Co., Lancaster, S. C.; Benj. Fisher, Logansport, Ind.; A. D. Mallinson, Plainfield, N. J.; J. F. Schott, Lebanon, Tenn.; J. Taylor Clark, Bayonne, N. J.; G. H. Corwin, Greenport, N. Y.; Burton Smith, Lansingburg, N. Y.; G. H. Corwin & Co., Shelter Island Heights, N. Y., and Fassett & Messaros, 439 Lenox avenue, New York City.

The Massachusetts Board of Pharmacy has just finished a three days' session, during which it examined 89 applicants, 8 of whom were granted certificates as follows: Joseph I. Moulton of Salem, Hairabed S. Djelalian of Cambridge, John S. Alley of Marlboro, William D. Sproat of Pittsfield, Samuel W. Munnis of Boston, James E. O'Connor of Haverhill, Herbert A. Wiswell of Worcester, Burton N. Holmes of Waverly.

President Canning takes exception to the exclusive credit which is given him in the last issue for organizing the Lawrence association. He states that Secretary Reeves of the Apothecaries' Guild, who by the way is doing yeoman work for the good cause, had been to this city previously and nicely paved the way for the success which met his (Pres. C.'s) efforts.

Thomas D. Q. Perry, 625 Shawmut avenue, has failed and the store is now closed. At a hearing of this case by the court George H. Gibson was chosen assignee.

A discharge was recently refused in the insolvency proceedings against James A. R. Underwood, 249 Columbus avenue.

A further hearing in the bankruptcy case of William R. Webster, 86 George street, will be held on April 27.

Lumbard & Bowman, North Cambridge, placed an order with Tufts of Boston recently for a new fountain.

George A. Purrington, Chicopee Falls, has made an assignment.

J. M. McDonald, South Boston, has a new Tufts fountain.

## Chicago.

After considerable interest had been awakened in the plan of the Universal Trade Association to prevent cutting, it seems that the scheme is about to be abandoned so far as Chicago retailers are concerned. Arrangements had been made to carry out the programme outlined in the last issue, but the experience of Mr. Von Hermann, who was delegated to visit the eastern manufacturers of proprietary medicines, rather put a damper on further movements of the local committee and they did not go to Detroit as intended. Mr. Von Hermann visited Lowell, Mass., where he interviewed the Hood and Ayer people. He received no encouragement



whatever and still worse met with a flat denial from these manufacturers that they had ever agreed to adopt any plan of the Universal Trade Association to prevent cutting. At a meeting Tuesday of the committee in whose hands the organization was trusted it was practically decided to drop the matter, but there are still among the local druggists some who have hopes. The leaders, however, are disgusted with the lack of interest shown by the manufacturers and openly declare that it is not their intention or never was their intention to co-operate with the retailers in putting an end to price cutting.

One leading druggist, who operates two of the largest stores in town, is earnestly endeavoring to get others to co-operate with him in putting out remedies under their individual labels. These he says they will sell at cost rather than handle certain patent medicines. So far he claims to have received substantial encouragement and the matter is to be pushed for all it is worth.

The Elkins Drug Company at the corner of State and Van Buren streets are exhibiting in their show window a remnant of the Seven Sutherland Sisters. The longevity of these ladies is the subject of probably more speculation than their wonderful haircuts. They have been before the public nearly twenty years and it must soon occur to their manager that he can just as well put up and advertise a remedy for lengthening years as well as hairs, and thus use the sisters as testimonials for both remedies at the same time. Mr. Elkins is satisfied that a life lengthening compound would meet with a wonderful sale.

Chas. F. Foskett & Co., 155 State street, are making a brave fight against cutters and holding their own in spite of many disadvantages under which they labor. They not only have one of the most expensive stores on the street, but they are in the midst of the large department stores nearly all of which have drug departments. Fortunately there is one feature of their business in which they have little competition. Since the opening of the store something over a year ago they have made a valuable reputation on soda water and other soft drinks.

A nice question has been raised by retail grocers in several Illinois towns as to what constitutes grocers' drugs. The State pharmacy law prevents grocers and others from dealing in medicines. Not long ago a grocer was fined for selling Epsom salts, and others have been prosecuted for selling sulphur, copperas, quinine, and similar commodities. Druggists are of course interested in preventing the handling of drugs by grocers, and are zealous in their efforts to prevent them from handling drugs of any description.

The drug clerks of Chicago have organized for mutual protection and benefit. According to reports it is the first purpose of the founders of the organization to secure employment for registered drug clerks out of employment and prevent the violation of State laws in the engagement of clerks not duly qualified. The president of the new association is I. Platt, Pulaski's Pharmacy, 723 W. 18th street. F. A. Lemka is secretary.

The handsome new store of C. L. Clancy at 1249 North Clark street is the latest addition to that rapidly developing portion of the city, and the residents are showing their appreciation by giving it liberal patronage.

F. H. Tuthill of Morrison, Plummer & Co. has resumed business after a severe illness.

A new store is being fitted up at the corner of Sixty-Third street and Cottage Grove avenue for Curti & Co., who will remove from their present quarters on Twenty-second street.

Chas. L. Feldkamp, a prominent North Side druggist, has confessed judgment for \$3,226, and his stock, including that of two large modern stores, will be sold.

Among the recent incorporations in the proprietary medicine line is the Franciscan Herb Medicine Company, with a capital stock of \$100,100.

H. B. Craig has succeeded George Ulmstead in business at Hoyne avenue and Harrison street, and will make some handsome improvements.

T. V. Wooten, 948 W. Madison street, was elected president of the Retail Druggists' Association at their last meeting.

The Jackson Park Pharmacy, operated for some time by Oscar F. Schmidt & Co., has been purchased by H. F. Krueger.

J. P. Huhen, a well known Chicago druggist, and Mrs. A. F. Collingham, also of Chicago, were married recently.

## Trade Notes.

The A. Ashfield Baker Co., 140 William street, New York, advertise "Everything in Sundries." This is laconic but sufficient for the purpose. They will supply anything in the line of druggists' sundries that may be called for. Test them with a trial order.

A card from A. W. Balch & Co., importers and jobbers of wines and liquors, will be found on the front cover page. Druggists who wish to stock wines and liquors of medicinal quality should send their orders direct to A. W. Balch & Co., 84 Front street, New York.

Every variety of crude, crushed, powdered and pressed roots, herbs, barks, etc., can be obtained through the United States Botanic Depot, Walter Adams & Co., 105 William street, New York. Druggists will do well to bear this in mind when their stock of herbs gets low.

Druggists who put up liquid specialties of any kind will be interested in the advertisement of James M. Maconnel, manufacturer of Clough's Patent Folding Corkscrews, which appears on page 9 of this issue. These useful little articles are much appreciated by the public and enhance the selling qualities of many proprietary compounds. Write for prices on quantity lots bearing your name and address.

Druggists everywhere are giving their best attention at the moment to the condition of their soda fountains and soda water requisites. The advertisement of Dr. H. L. Bowker & Co., manufacturing chemists, 297 Franklin street, Boston, is therefore timely and interesting. We have always admired the artistic beauties of Dr. Bowker's advertisements, but this one, our readers will agree, surprises all. As an advertisement it should prove most attractive and profitable.

There is nothing in the line of druggists' glassware and sundries which you cannot obtain from Neidlinger Brothers, 18 Warren street, New York. Of the articles which can be bought to especial advantage from this well-known firm may be mentioned rubber water bottles, fountain syringes, bulb syringes and atomizers. Investigation will show you the advan-

tage of dealing direct. Price lists giving full particulars will be sent to any druggist who mentions this paper when writing.

## Insect Powder Boxes.

If you use Insect Powder Cans or Dredge Boxes, you want those which are the least trouble to fill and handle. Joseph G. Taite's Sons, Philadelphia, Pa., manufacture a most convenient and handsome box, as represented herewith. They have a New Style Sifting Top with an Extra Lid of Gold Lacquered Tin. There are no wheels to break your finger nails. They are tall and shapely, and made to hold the following quantities of Persian powder, viz. 2 oz., 8 oz., 4 oz. and 8 oz.

Druggists who are putting up insect or other powders will find them a very convenient and attractive package.

Send for prices and for samples mentioning this paper.

## Pure Pepsin.

The Cudahy Pharmaceutical Company South Omaha, Neb., with branch offices at 57 North Moore street, New York, have an interesting announcement in this issue with regard to the pepsin test adopted by that firm January, 1898. The point made that Cudahy & Company were the first to use and recommend the test now official in the United States Pharmacopoeia, the method of the revised United States Pharmacopoeia, being in almost every detail their own. They state that their facilities for producing digestive ferments are unusually large, every grade of pepsin from 100 to 1000 being manufactured to supply the demand. Among the numerous pharmaceutical products which can be obtained in bulk on favorable terms from the Cudahy Pharmaceutical Company are pepsin, pancreatin, beef extract, beef peptone, wine of peptone, and ox gall. The firm may be addressed at either of the addresses given above.

## A New Menthol Inhaler.

Sharpe & Dohme, manufacturing chemists, Baltimore, have brought out a novelty in menthol inhalers which is sure



MENTHOL INHALER  
CLOSED.

MENTHOL CONE  
OPENED.

to prove popular with the public. It consists of a combined menthol inhaler and cone in an attractive silver plated case and its design is shown in the accompanying cuts

# American Druggist and Pharmaceutical Record.

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## Cannot Get Along Without It.

I don't think I could get along without THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. DAN. G. SULLIVAN.  
HIGH ST., HOLYOKE, MASS.

## Found at Last.

Inclosed please find money order for \$2 50 for subscription to AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD for one year and the *Cosmopolitan* for one year in accordance with your previous proposition on page 11 of your April 12 issue. I think THE DRUGGIST is just the thing I have been looking for. E. NORTON.  
CONWAY, S. C., April 21, 1894.

## A MISLEADING QUOTATION.

IN our editorial columns of February 22 we called attention to the fraud which was being perpetrated upon saloon keepers and small dealers through the South in the sale of what purported to be formulas for the manufacture of wines and liquors. For the information upon which this article was based we were indebted to the courtesy of LEHN & FINK, whose name appeared on the printed sheet of formulas, the title of the firm having been unwarrantedly used by the perpetrators of the fraud. This firm has been for a long time actively endeavoring to capture the perpetrator of this fraud and have him punished, and prior to giving us the facts in the case had laid them before the police authorities of this city in the hopes that the operator might be apprehended.

For the public spirit shown by LEHN & FINK in this matter and for their prompt action on other occasions when frauds had been attempted on the drug trade, LEHN & FINK well deserve the thanks of everyone interested. It is with much regret in view of the foregoing that we note that the *Deutsch Amerikanische Apotheker Zeitung* of April 15 has quoted the editorial referred to in so garbled a manner as to fail to give this firm the credit which is due them for having exposed the rascally operations referred to, and in fact the phraseology used is such as might possibly convey the impression to the minds of those who have not read the original article that LEHN & FINK themselves were somewhat to blame in the matter. It is with a view of expressing more distinctly our thanks to this latter firm for their praiseworthy action in the matter that we again direct attention to it.

## OUR QUIZ BOX.

THE object of the series of questions propounded in these columns is to offer practical suggestions to the student as to his weak points. While examinations are usually applied as a means of determining one's attainments, their greatest value to the student is in showing him his deficiencies, and thus indicating the direction which his studies must take.

The questions in this series are arranged with a view to combining the advantages of a systematic if somewhat cursory

course of questions on the elementary aspects of pharmacy and the allied sciences with some questions of a more practical character. In order to accomplish this the questions of each week's issue deal with the elementary phases of the several branches of science enumerated in the first series of questions propounded. These are Physics, Chemistry, Botany, Pharmacognosy, Pharmacology, Pharmacy, Materia Medica; Therapeutics, Posology and Metrology.

The questions on Physics, Chemistry Botany, Pharmacognosy, Pharmacology and Therapeutics, have already been printed. This week we have to do especially with Pharmacy. The relation between several of the different branches of science enumerated is so intimate that a knowledge of the one necessarily implies more or less knowledge of the other. The general trend of the questions asked, however, will continue to follow the scheme laid out.

Having once made the round of the ten branches referred to they will again be taken up in the same order, the questions being of a rather more advanced character than were the first.

## PAPERS FOR THE A. P. A.

THE Scientific Section of the American Pharmaceutical Association are very desirous of hearing from members with regard to the subjects upon which they will write, and to have them send papers ready for printing to the chairman.

The committee is composed of L. E. SAYRE, chairman, Lawrence, Kansas; CHAS. M. FORD, secretary, Denver, Col., and F. S. HERBETH, associate member, Chicago, Ill. Papers will be received by any member of the committee whose name appears above.

REFERRING to the value of the trade information contained in our reports of the markets a prominent house of Salt Lake City after alluding to the value of the technical matter which appears in our columns say:

The complete weekly price list and trade notes are of inestimable value to druggists in this territory where fluctuations of prices on staples reach us regularly at best but once a month. THE DRUGGIST AND RECORD is worth many times the price you ask.

**Formalin as a Disinfectant.\***

BY DR. S. RIDEAL,

Lecturer at St. George's Hospital, London.

Experiments that I have made with formalin as a disinfectant and preservative agent have yielded some very interesting results, and I am fully satisfied that in it we possess a bactericide and antiseptic of considerable value. When added in very minute proportions to substances capable of undergoing putrefactive change it prevents such decomposition for a considerable time. This preservation may be effected in the case of liquids by adding a small amount of a diluted formalin solution to them, and in the case of solids either by spraying them from time to time with a weak solution, or by suspending them in an atmosphere impregnated with the formalin vapor. Thus, for example, I have kept beef tea for upward of a fortnight free from smell and quite clear with an addition of 1 cc. of a 1 per cent. solution to 100 cc. of the liquid. This corresponds to a dilution of 1 part in 10,000, and would be effected by adding one fluid ounce of the 4 per cent. formalin solution to 40 fluid ounces of beef tea. Milk containing the same amount of formalin has remained sweet for twelve days. I have also succeeded in keeping a piece of raw beefsteak perfectly free from any taint for upward of seventeen days by suspending it under a bell-jar above a little cotton wool impregnated with a few drops of the strong formalin solution. In my experiments with pathogenic organisms a solution of formalin containing 1 part in 15,000 has been found powerful enough to arrest the growth of most of the species examined. Experiments with the vapor have shown that in this form it is extremely toxic to micro-organisms in the air and adhering to walls and articles of furniture in rooms. I believe that its use in this direction will be found very valuable, as at present there is no gaseous disinfectant which can be recommended for this purpose that has no injurious effect upon such materials. I have also had an opportunity of trying the effect of formalin as a preservative of specimens from the post-mortem room, and find that a 1 per cent. solution is very effective for this purpose. The liquid does not become turbid nor dark colored, and after three weeks' constant use and exposure to the air its strength had only fallen from 1.0 to 0.45 per cent.

**Liqueurs in a New Light.**

The *Mineral Water Trade Recorder* for April contains an interesting article on the blending of liqueurs. It says: In the preparation of liqueurs the first and great consideration is the perfuming and flavoring. It is necessary to know how the various substances to be mixed together harmonize and agree with each other. It has often been observed that an aromatic substance when isolated is far from agreeable, but on the addition of some other substance, quite different may be in its qualities, the perfume is developed and made more perfect.

It is on this principle that the quince alone is unpleasant—a little clove relieves and corrects the odors; while the after taste of cinnamon is also corrected by cloves; vanilla, when ground up with sugar, is more aromatic than when the latter is omitted; and the bitterness of absinthe (wormwood) is masked by the perfume obtained from the rind of a

lemon. The working out of these principles gave rise, in the latter part of the last century, to a system which claimed the power of producing as many liqueurs as there are musical airs: and a French writer thought it possible to arrange a music of flavors analogous to the music of sound. He said: "The charm of liqueurs depends on the flavors being mixed in harmonious proportions. Flavors consist in the more or less intense vibrations of salt; which act on the nerves of taste, just as sounds are produced by vibrations in the air which act on the nerves of hearing; there may be, then, a music for the tongue and palate, as there is a music for the ear. It is very probable that flavors, in order to excite different sensations in the mind, have, like sonorous bodies, their generating dominating notes—major, minor, grave, acute tones; even intervals, and, in fact, all that may produce concord and discord.

"These flavors are: 1, acid, *ut*; 2, heavy, *re*; 3, tart, *mi*; 4, bitter, *fa*; 5, sweet, *sol*; 6, harsh, *la*; 7, pungent, *si*.

"In the music of flavors the thirds, fifths, and octaves produce the most pleasant concords, precisely as in the music of sound. Mix the acid and sweet which answers to *ut*... *sol*, 1... 5, lemon, for example, with sugar, and you have a simple but most charming concord—a major fifth. Mix the acid with the tart or sub-acid, as the juice of the bigarade orange with honey, for example, and you will have a tolerably pleasant flavor analogous to *ut*, *mi*, 1—3, a major third. Mix the sweet with the pungent, and the concord will be less pleasant. To render it more agreeable, raise or lower one or other of the flavors half a tone, answering to flats and sharps, and you will discover a marked difference, etc.

"The discords are not less similar in either species of music; in the music of sound the fourth is a disagreeable cacophony; in the music of flavors, the mixture of acid with bitter, of vinegar with wormwood, produces an abominable compound. In a word, look on a well prepared liqueur as a species of musical air."

**Photography of Colors.**

The process of photography of colors, discovered a few years ago by M. Lippmann, has been considerably improved, and has now been brought to such a degree of perfection that with it the composite colors of natural objects, such as flags, flowers, and fruits, a parrot of many colored plumage and a church window in four colors, red, green, blue and yellow, are photographically reproduced. In the hands of M. M. Lumière it has been applied successfully to chromolithographs, natural landscapes, and portraits. The time of exposure required has been reduced from thirty minutes a few months ago to from three to five minutes. While so much has been accomplished in this art, many requirements remain to be fulfilled: the time of exposure to be further reduced; accurate isochromatic plates to be obtained, and a way found of taking proofs on paper. The colored proofs have the property of the old-fashioned daguerreotypes, of not being clearly visible except when viewed at the right angle. This property, however, has the great advantage that it makes retouching of the picture impossible. To remedy the inconvenience arising from it, M. Lippmann has devised an apparatus for viewing the pictures by the aid of which the proper conditions of the angle can always be obtained.

**Queries and Answers.**

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Walnut Catsup.** H. K.—The following is considered a good recipe for this favorite relish:

Walnut shell juice.....	3 gallons
Salt.....	7 lbs.
Ginger.....	8 ozs.
Shallots.....	8 ozs.
Garlic.....	8 ozs.
Horseradish.....	8 ozs.
Essence of anchovies.....	1 quart

**Mix.**

**Mushroom Catsup.** H. K.—The following is taken from Cooley's Cyclopaedia:

Mushroom juice.....	3 gallons
Pimento.....	2 ozs.
Cloves,	
Black pepper,	
Mustardseed,	3 ozs.
Ginger,	
Shallots.....	3 ozs.

The spices are first bruised, then mixed with the mushroom juice and shallots, and the whole allowed to simmer for one hour in a covered vessel, Strain into suitable bottles when cool.

**Booth's Hydrostatic Bottle Filler.** C. A. P.—T. & Co. inform us that information concerning the above article can be had by addressing C. F. Booth, P. O. Box 1308, New York.

**Calisaya La Rilla.**—R. A. McR. writes: "Will you kindly publish a formula for elixir calisaya to resemble the preparation sold as Calisaya La Rilla."

The following is said to afford a similar compound:

Calisaya in No. 60 powder.....	640 grains
Lime, calcined in powder.....	1 ounce
Glycerin.....	4 drachms
Hydrochloric acid.....	10 minims
Syrup.....	7 fluid ounces
Oil of orange.....	45 minims
Oil of lemon.....	10 minims
Oil of coriander.....	5 minims
Water.....	q. s.
Alcohol.....	q. s.
Fuller's earth.....	4 drams

Mix the calisaya and lime intimately, add  $3\frac{1}{2}$  ounces of water, stir well and let dry slowly. Percolate with a mixture of the acid and alcohol, adding sufficient alcohol to bring the bulk up to 4 fluid ounces. To this add the oils, and, after shaking thoroughly the glycerin, syrup, and sufficient water to make one pint: finally add the Fuller's earth, shake well and filter.

**Acid Phosphate of Lime.**—J. W. W. writes: "You publish on page 43 of the issue of January 25 five recipes for baking powder, and one of the articles called for is 'acid phosphate of lime.' Will you kindly inform me what it is and where it can be bought? I have made inquiries at two of the largest wholesale drug firms in Chicago and they could give me no information as to its component parts."

Acid phosphate of lime as understood by chemists is the mixture of substances formed after phosphatic rocks (chiefly calcium phosphate) are treated with sulphuric acid. The sulphuric acid removes from the tricalcium phosphate one or two

\*London Therapist.

atoms of calcium, forming mono or dicalcium phosphate and calcium sulphate. Few wholesale druggists handle the substance, it being obtained best from bakers' supply houses.

**Petroleum Emulsion.**—H. C.—The following formulas will be found useful:

Liquid petrolatum.....	16 ozs.
Powdered acacia.....	8 ozs.
Glycerin.....	4 ozs.
Calcium hypophosphite } of each.....	288 grs.
Sodium hypophosphite }	
Water, enough to make.....	3 pints

Add the acacia to the oil and mix thoroughly in a large mortar; then add 1 pint of water (all at once) and rub briskly until the emulsion is formed. Dissolve the hypophosphites in a half pint of water, to which add the glycerin; then add all to the emulsion and rub well together, adding any water necessary to make up the measure of three pints of finished product.

Liquid petrolatum.....	4 ozs.
Oil sweet almonds.....	2 ozs.
Powdered acacia.....	1½ ozs.
Glycerin.....	1½ ozs.
Sodium hypophosphite.....	128 grs.
Calcium hypophosphite.....	128 grs.
Lime water, enough to make.....	1 pint

**Anæsthetic Salve.**—A. H. B. writes: "Can you give me a formula that will embrace the following ingredients that can be poured into boxes while warm and remain perfectly mixed: Vaseline wax, resin, camphor, carbolic acid, and an anæsthetic similar to stramonium."

We know of no substance capable of replacing stramonium, as the drug has a remedial action peculiarly its own. The ingredients named can be made into suitable combination by taking for every 5 parts of the vaseline 3 parts of a mixture of wax and resin, 1 part of camphor, 1 per cent. of carbolic acid and, say, 5 per cent. of extract of stramonium seed. The extract should be rubbed up with sufficient dilute alcohol to liquefy before adding it to the other ingredients.

**Pile Ointment.** A. H. B.—The following credited to Barré is highly recommended:

Potassium iodide.....	gr. xxx
Extract Krameria.....	3 i
Sydenham's laudanum.....	℥ viii
Extract belladonna.....	gr. viii
Prepared lard.....	3 i

Make into an ointment, with which the piles are to be rubbed morning and night.

**Infusion of Ipecac from the Powder.**—J. L. P. writes: "I received the following prescription recently:

Infus. rad. ipecac.....	1.0-180 gms.
Syrup tolu.....	25 gms.
Sig. Tablespoonful every 3 hours.	

Knowing that my ipecac root had been in stock for about 8 years, probably more, I made the infusion from the powdered root, which I knew to be fresh, taking the precaution to triturate the powder with water to avoid lumping.

The physician who wrote the prescription came to me a few days afterward and asked me how I had made the infusion. I told him as above stated. He claimed that I had done wrong; that I had substituted; that the infusion had no no taste of ipecac and that it had no expectorating effect whatever.

I claimed that I did not substitute; that the taste was marked by the syrup of tolu and that I was correct in my dispensing, except that I did not provide for the fact that the powdered root contains more emetine than the whole root. Please decide."

Although the freshly bruised root of ipecacuanha is to be preferred, when obtainable, for making this infusion, the pharmacist who uses the finely powdered article does not thereby lay himself open

to a charge of substitution, and we think the physician was unnecessarily severe in his criticism. Pharmacists would do well, however, to be governed by the U. S. Pharmacopœia in the preparation of all galenicals; the general directions for the preparations of infusions provide for the use of the coarsely comminuted substance.

**Keeley Cure.** A. H. B.—The formula printed in our issue of last week should be corrected in one particular—the amount of fluid extract of cinchona should be increased to 3 fluid ounces. The dose is a teaspoonful.

**Brandes Toothache Drops.** M. R.—This is composed of

Powdered pellitory.....	1¼ ounces
Powdered camphor.....	1 ounce
Opium.....	¾ drams
Oil of cloves.....	75 minims
Alcohol, enough to make.....	1 pint

Macerate for eight days, press out and filter.

**Tully's Powder.** H. G. C.—This is the Compound Powder of Morphine of the U. S. Pharmacopœia.

**Solution of Magnesium Citrate.** H. G. C.—We must refer you to the U. S. Pharmacopœia for a formula for the above.

**Bradycrotine.** V. H. & E.—We are unable to supply a formula for this compound.

**Elixir Lactopeptine Co.** F. H. P.—This is a proprietary preparation for which we cannot give you the exact formula. By operating as follows, however, you can produce a preparation closely resembling it.

First prepare a powder of lactopeptine composed of:

	Parts.
Pure pepsin.....	10
Pancreatin.....	10
Diatase.....	1
Lactic acid.....	1
Hydrochloric acid.....	1
Sugar of milk.....	75

Powder the pepsin and pancreatin by rubbing with the sugar of milk, add the diatase, and when they are all reduced to a fine powder and intimately mixed add the acids first to a small portion by rubbing them well together, and then add the remainder and mix.

To make elixir lactopeptine take

Powder of lactopeptine (as above).....	384 grains
Glycerin.....	2 fl. ounces
Water.....	2 fl. ounces
Simple elixir.....	12 fl. ounces

Macerate the powder of lactopeptine in the mixed liquids for several days in a warm place. Color with solution of cochineal (see page 193) and filter.

**Density of Syrup.**—F. H. P. wishes to know how he must proceed to find the density in degrees of a syrup. He instances the rock candy syrup which he uses, saying that the density of it is placed at 32°.

The density of a syrup is best ascertained with the saccharometer, an instrument especially designed for taking the comparative gravity of syrups intended for crystallization.

## Correspondence.

### One Number Worth Five Years' Subscription.

**Editor AMERICAN DRUGGIST:**

Your Review of the Wholesale Market upon one occasion alone saved us more than five times the price of the journal, i.e., as follows: We were purchasing gum opium and your quotation on the above

saved us \$2 exactly. At the same time we were ordering wood alcohol. The best price given us was \$1.25; your journal gave it 90 cents per gallon, and as we were buying 20 gallons it amounted to just \$7 of a gain. So you can easily see why we have a good opinion of your journal. Your topics are timely and interesting, and above all you have an air of stability, and, as we have learned, thoroughly reliable.

SHROM & COMPANY.  
GREENVILLE, PA., April 23, 1894.

### An Incentive to Study.

**Editor AMERICAN DRUGGIST:**

Your "Quiz Box" is such a novelty and such an incentive to study that I have determined to show my appreciation by entering the lists; not with expectation of winning a prize, but for the simple benefit of bringing before my mind the few things I know, as well as the many I do not know.

We have been taking the journal for three years, and I now feel that we cannot do without it. We have not the business transactions of a drug store, but in all other things we need the help and advice often found in its columns.

I am not a graduated pharmacist, nor ever will be, and with but a few stolen moments for study I cannot hope to answer all your questions, but for the sake of spurring myself on I submit what I can.

— HOSPITAL, NEW YORK.

### "Thoughts on an Elixir."

**Editor AMERICAN DRUGGIST:**

So much has been said at different times in the different drug journals relative to elixir of iron, quinine and strychnine, that I venture to give you a formula that has been used by me for the past eight years and with which I have never had the slightest trouble, neither in making it nor in keeping it after being made:

Quinine sulphate.....	572 grains
Strychnine sulphate.....	10 grains
Pyrophosphate of iron.....	1,440 grains
Alcohol.....	22 fl. ounces
Spirits of orange.....	2 fl. ounces
Distilled water.....	16 fl. ounces
Simple syrup.....	24 fl. ounces
Citric acid.....	20 grains

Dissolve the pyrophosphate of iron in the distilled water; dissolve the sulphate of strychnine in a small portion of alcohol by the aid of a test tube and heat, and add this strychnine solution to the remainder of the alcohol and dissolve in this mixture the quinine, then add the spirit of orange. Heat the simple syrup to boiling point (be sure that you reach the boiling point), add to it the alcoholic solution and stir constantly with a glass rod adding gradually the solution of pyrophosphate of iron, now add citric acid in a powdered state and stir until clear, you can now remove heat and allow to cool for about 20 minutes when you must neutralize with aqua ammonia.

Each fluid dram contains one grain of sulphate of quinine, 2 grains of pyrophosphate of iron and ¼ of a grain of sulphate of strychnine. This formula differs somewhat from the formula in National Formulary, in that citric acid is used in place of citrate of potash and pyrophosphate of iron is used in place of phosphate of iron, also sulphate of quinine in place of hydrochlorate of quinine—the strychnine strength of the finished product is some different; altogether there is not much difference in the two; and the ease with which my formula is prepared overbalances the slight differences.

A. J. EMBREE.

BELTON, TEXAS, April 14, 1894.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in the issue for the third week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within two weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

## Answers to Questions; Fourth Series.

46. Calyx (sepals), corolla (petals), stamens, pistils and torus. These are the distinctive organs of a flower unless the ovary and its ovules (part of the pistil) and anther (part of the stamen) be so designated.

47 (a) When all the organs of the same name are alike in size, shape and position, the flower is regular.

(b) When all the whorls have the same number of parts or multiples thereof the flower is symmetrical.

48. A flower is incomplete when it lacks a calyx or corolla, or both.

An imperfect flower is one wanting either stamens or pistils.

49. A stamen having an anther without a filament is sessile.

50. Monandrous flower has but one stamen.

Polyandrous flower has twenty or more stamens.

51. The peculiar granular dust or, sometimes, sticky mass, found within the anther which fertilizes the ovules.

52. That portion of a pistil between the stigma and ovary.

53. The stigma is the upper, glandular, or vascular end of the pistil designed for the reception of the pollen.

54. Monogynous means having but one pistil. Hexagynous means having six pistils.

55. A gymnospermous pistil is one in which the ovary is naked and the ovules are borne upon a mere scale, as in the pine and other cone-producing plants.

56. Leaves, roots, bark, flowers and wood are all used, more generally the first four.

57. To the alkaloids, glucosides, salts, oils, gums, resins, etc., which they contain.

58. Stem is that part of a plant which usually grows upward into the air, having nodes and internodes growing by internodular growth and which bears regularly placed appendages for respiration, digestion and reproduction. Some stems, however, are found beneath the surface and serve to perpetuate the plant: calamus and tulip.

Root is that part of the plant which, usually, grows down into the earth, sup-

ports the plant and absorbs a portion of its food; in the biennials it is also a store of food for the beginning of next season's growth. Unlike the stem the root has neither nodes nor internodes, its branching is irregular and it seldom originates other organs. It elongates only at the end and then not by the apex, like the stem, but by a layer developed under the apex. Roots are sometimes found above ground, upon the stem, and serve to hold the plant in position or to absorb food from the air, as in rhus and Florida moss.

59. Southern Europe and Asia are the most important sources of supply.

(b) Root.

(c) Demulcent and expectorant.

(d) Extractum glycyrrhizæ fluidum.

Extractum glycyrrhizæ purum.

Glycyrrhizinum ammoniatum.

Pulvis glycyrrhizæ compositus.

60.

SALINE APERTENTS.	DOSE.
Potassii bitartras.....	3 iv to 3 i (1)
Potassii et sodii tartras.....	3 ss to 3 i (2)
Sodii sulphas (crystals).....	3 vi to 3 xii
Sodii phosphas.....	3 vi to 3 xii
Magnesi sulphas.....	3 ss to 3 i

## Names of Students whose grade stood 75 on Questions 46 to 60.

W. J. Adams, Manchester, E. Q. Anewalt, Philadelphia.

E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. Heywood Boone, Clinton, Ky. John W. Brewer, Lake Preston, S. D. W. E. Bruce, Boston, Mass. J. C. Boyer, Wiconisco, Pa. T. M. Broadus, Gordonsville, Va. William Browne, New York City, G. E. Barkdale, Richmond, Va. T. H. Breneman, Harrisburg, Va. Roscoe Brown, Oxford, Pa.

Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Lester Card, Woonsocket, R. I. Chas. S. Cogley, Lowell, Mass. W. P. Craig, Indianapolis, Ind. Chas. L. Chapple, Minneapolis, Minn. W. S. Collin, Mitchell, S. Dak. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp, Mount Morris, N. Y. F. J. Dewberry, Centerville, Tenn.

William E. Gokay, Bennington, Vermont. Max A. Golts, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.

L. Harding, Fergus Falls, Minn. Frank Hartmann, Middletown, Conn. H. B. Harrop, Columbus, O. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Hooch Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

Wm. L. Knuth, Springfield, Ohio. W. Frank Krebhiel, Dayton, O.

J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. C. W. Linch, Lewisburg, Pa. M. D. Lingier, Philadelphia, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Laval, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Milla, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn. Arthur Morin, Houghton, Mich.

W. B. Nethery, Toronto Junction, Ont. Edward L. Page, Lancaster, Pa. F. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.

T. J. Quirin, Santa Clara, Cal. A. V. Rand, Wolfville, N. S. M. E. Read, Waukeon, Ohio.

C. D. Sauvinet, New Orleans, La. Clinton Sellers, Kencordino, Ontario. Wm. E. H. Schneider, New York City. Edgar B. Scott, Norfolk, Va. William W. Scott, Highland Falls, N. Y. L. W. Simonds, Providence, R. I. Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. A. W. Walter Spingler, Toronto, Ont. Dan G. Sullivan, Hooke, Mass. Walker L. Stephens, Philadelphia, Pa. McDonald Scott, Chicago, Ill. S. M. T., St. Peter's Hospital, Albany. W. E. Sniwel, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa.

Lou Taylor, Greenfield, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Miss Edith Tompkins, Jasper, Fla. Walter L. Tichenor, Brooklyn.

W. H. Van Strander, Winsted, Conn. Chas. G. Vernon, Florida, N. Y.

M. D. Martin, Redwood Falls, Minn. Bertie Ward, Orange, N. J. Miss Emma A. Wiggins, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

Read the "trade notes" and the market reviews every week if you want to keep posted.

## Questions; Seventh Series.

### PHARMACY.

References: Special articles in the Dispensatory, Remington's Pharmacy, Heebner's Manual of Pharmacy and Pharmaceutical Chemistry, Proctor's Pharmacy, Cripp's Galenical Pharmacy, etc.

Define the following terms and give an instance of their application in the preparation of a medicinal substance:

81. Desiccation.
82. Exsiccation.
83. Fusion.
84. Oxidation.
85. Destructive distillation.
86. Sublimation.
87. Lixivation.
88. Elutriation.
89. Trituration.
90. Contusion.

## Pennsylvania.

John C. Quinn of Bellwood, Pa., has in his new store a set of Bangs' fixtures.

G. L. Ross and Robert C. Dickinson recently opened a drug store at 1120 State street, Erie, Pa.

Arthur B. Hammond, the West Chester (Pa.) pharmacist, has added to his store a set of C. H. Bangs' fixtures of Boston.

Dr. Owen is building an office and drug store room on the property lately bought of C. A. Haught on Jane street, Ft. Marion.

The drug store of Mary Muller of Butler, Pa., presents a very attractive appearance since being improved by a set of C. H. Bangs' fixtures.

J. M. Hilan, the druggist, will move his store from the corner of Main and Centre streets, Shenandoah, to the room made vacant by M. A. Ferry.

Mr. Frank S. Dunkle, of Wellsboro, has purchased the drug store that was sold a few days ago as the property of A. C. Roland, Westfield. Mr. Roland will have charge of the business.

Ex-Postmaster James W. Barnitz of New Oxford has disposed of his drug and stationery store to J. W. Dick, who will move into Mrs. Herman's house on the corner of the Public Square and Hanover street.

J. H. Kirk's new drug store, at the corner of Seventh street and Concord avenue, Chester, is now open and is in full blast. With its new furnishings, new stock, and artistic design, the store is as pretty as a picture.

George Young, who recently passed the best examination of any man in the junior class of the Philadelphia College of Pharmacy, has returned to his home in Johnstown, and will assist his brother Charles in his store until September. Druggist Young's former clerk, Ralph Anderson, has left for Philadelphia, where he will read medicine.

The store and dwelling house, corner of George street and East Newton avenue, York, recently occupied by Wm. Mitzel & Son, will be remodeled and greatly improved by the owner, Mr. Wm. Givens, and an open front will be put into the building, which will be fitted up for a first-class drug store, which will be occupied by Dr. J. A. Stoner.

Messrs. H. B. Stoner and A. T. G. Hudnutt, who recently purchased the stock and fixtures of the East End Drug store, York, from Dr. J. A. Stoner, removed the room rented by them at the corner of George street and Newton avenue. Dr. Stoner retires entirely from the business and will devote all his time to the practice of medicine.



## Boards and Colleges.

**NEW HAMPSHIRE COMMISSION OF PHARMACY.**—The second quarterly meeting of the Commission of Pharmacy was held at Concord; Wednesday, April 25. Seventeen candidates presented themselves for examination. The following were successful: George H. Sanborn and Alfred B. Stimson of Concord; Willard C. Leonard of New London; Edgar E. Castor of Manchester; Daniel J. Buckley of Boston, Mass.; Arthur Clarke of Dover; Harry L. Benson of West Derry; Dante Smith of Manchester.

The third quarterly meeting will be held Wednesday, July 25, 1894, probably in Manchester. For further details apply to Geo. F. Underhill, secretary, Concord, N. H.

**ALUMNI ASSOCIATION CHICAGO COLLEGE.**—The annual reception and banquet of the Alumni Association of the Chicago College of Pharmacy will occur at the Schiller Recital Hall (Schiller Theater Building), Chicago, on Thursday evening, April 26, 1894, at 8 o'clock.

The second meeting of the Illinois Registered Drug Clerks' Association was held in Chicago April 22, when a constitution was adopted and the following officers elected: president, Fred Rudnick; vice-presidents, E. R. Bond, W. A. Stucklik, J. Platt; secretary, F. A. Lemke; treasurer, W. T. Winters.

A special committee was appointed to select quarters for the organization in the downtown district.

The Milwaukee Drug Clerks' Association met at 323 Chestnut street, Milwaukee, on April 15. The programme was as follows: Address, President H. P. Weber; discussion of inorganic salts, Charles Wasweyler; paper, E. Meniecke, Jr. Over twenty applications for membership were acted on. The association has received many gifts from Milwaukee business firms.

## New York.

H. A. Siegrist of the Rio Chemical Co., St. Louis, is stopping at the Waldorf.

Thomas & Co. have opened a new pharmacy at 65th street and Columbus avenue.

F. H. Francke & Co. have bought out the store of McClelland & Patton at 121st street and Manhattan avenue.

J. H. Sheehan of J. H. Sheehan & Co., Utica, N. Y., was a visitor to the New York drug market last week.

The Crown Cordial and Extract Co., formerly of 71 Water street, New York, are now located at 18 Desbrosses street.

Will H. Lowe, who looks after the New England interests of the Eisner & Mendelson Co., was in this city for a few days last week.

Henry E. Wensch, Jr., N. Y. C. P. Class of '93, is now manager of the store of Louis E. Rupp at the corner of Thirty-sixth street and Ninth avenue.

James Grant, P. C. P., '87, who has two flourishing stores at Asheville, N. C., and who is chairman of the local entertainment committee for the next A. P. A. meeting, is stopping at the Astor House.

An effort is being made to introduce bromo-seltzer in England. Mr. Emerson, president of the Emerson Drug Co. of Baltimore, Md., is now in London making arrangements for that purpose.

Professor Kennedy, dean of the School of Pharmacy of the University of Texas, is preparing a work on the practice of pharmacy which will be published some time this fall. He has issued a very useful chart of the official salts for use by the students of the school.

A. Frank, class of '88 N. Y. C. P., has purchased the building and business of F. W. Hille at Union Hill, N. J. Mr. Frank will occupy the residence portion of the store building with his parents.

The Wonderine Mfg. Co. have a handsome and striking display in the windows of Wilson's store at Thirty-fourth street and Broadway. The name Wonderine is arranged in a series of electric lights in a most attractive manner.

Dr. Henry Leffman of Philadelphia has been engaged to deliver a series of twelve lectures on fuels, starches, fats, sugars, etc., before the normal class of the New York Cooking School, of which Miss C. C. Bedford is principal. The first lecture of the course was given on Thursday, April 19.

Leo Jaffe of Bloomfield, N. J., who came into prominence by suing the Townley Drug Co. on the charge of selling him cod-liver oil which had been bleached by means of potassium cyanide, has again come forward as a litigant. This time he is suing his own townspeople for defamation of character.

Newton Dart Phillips, of Reeder Bros' pharmacy, Thirty-first street and Fourth avenue, who has been of valuable assistance recently in securing subscribers to *The Alumni Journal* of the N. Y. C. P. has decided to quit pharmacy and qualify as a physician. He will matriculate at one of the medical schools in the Fall.

A strange looking man entered Atwood's Star Theater Pharmacy the other day during the temporary absence of F. G. Conch, who has charge, and planting one foot upon a chair and the other in a shallow glass show case loudly announced his intention of slaying the prescription clerk. Norman H. Sipperly, who acts in that capacity, is a mild-featured gentleman of most disappointing athletic tendencies and he lost no time in meeting the stranger's advances. Before the latter was fully aware of it he found himself lifted off his feet and carried toward the door. It was then a work of small moment to deposit him on the sidewalk, where he speedily took to his heels and was lost to view. It was afterward ascertained that the man was suffering from homicidal mania.

The druggists in the theater district are fairly well accustomed to sensations of this kind. Not long ago John W. Ferrier of Hegeman's pharmacy under Palmer's Theater had a startling experience with a *Herald* reporter who, being crossed in love, attempted to commit suicide on the premises. The reporter engaged Mr. Ferrier's attention, alleging that he had been sent by the editor of his paper to interview him on the subject of poisons. He asked Mr. Ferrier what the latter would consider a fatal dose of laudanum. Mr. Ferrier told him a half-an-ounce of laudanum of pharmacopoeial strength would be likely to have a fatal effect if taken at one dose. The reporter, with what seemed to Mr. Ferrier the characteristic ignorance of laymen, asked to be shown what a fluid ounce looked like. Mr. Ferrier picked up a graduate and poured out four drachms to demonstrate the quantity, and after holding it up for exhibition placed it carefully on one side. The reporter pretended surprise at Mr. Ferrier's statement, and, picking up the graduate, asked him again if he was certain the dose would kill. He was no sooner answered in the affirmative than he put the glass to his lips and tossed off its contents. Mr. Ferrier was so astounded at this unexpected behavior that he could simply stare at the man. Then he felt like knocking him down, but conquered this

feeling sufficiently long to send for a policeman, who escorted the reporter to the station house, where he was pumped out and afterward locked up on a charge of attempted suicide.

The list of honor men of the graduates of '94 N. Y. C. P. comprised: W. Arthur Bastedo, New York City; Ernest Jordan, Auburn, Me.; Brevard Culp, Mooresville, N. C.; Fred. C. Schaefer, Brooklyn, N. Y.; Jos. R. Wood, Flushing, N. Y.; Henry Kreuder, New York City; J. Henry Wurthmann, New York City; Wm. Ralph Shaul, Richfield Spring, N. Y.; Otto Neubert, New York; Chas. O. Grube, Windsor Locks, N. Y.; Frank J. Herbig, College Point, N. Y.; Benj. J. Williams, Haslettsville, Del.; Francklin G. Hills, Havana, N. Y. The winners of the special college prizes were Joseph Reimington Wood—Operative Pharmacy; Fred. C. A. Schaeffer—Practical Chemistry; Ernest Jordan—Pharmacognosy and Materia Medica. The Alumni medals were awarded to W. Arthur Bastedo (gold), Ernest Jordan (silver), Brevard Culp (bronze).

The State of North Carolina was through inadvertence omitted from the list of graduates by States in our issue of last week. The students from that State who were successful in passing the examination and upon whom the degree of Ph.G. was conferred are: Frank S. Smith, Asheville; Brevard Culp, Mooresville; Gray B. Sullivan, Ruth; Alfred H. T. Walker, Wilmington.

The class supper held at Clark's on April 23 proved a very enjoyable affair. Peter J. Ehrigott, president of the class, acted as toastmaster and introduced the following of his classmates, who responded to toasts: Frank J. Kellar. Our History; Fred P. Hiltz. Our Alma Mater; Nelson S. Kirk, Our Faculty; Joseph R. Wood, Our Future. Joseph Kuseay delivered a valedictory address which was well received, while Alfred H. T. Walker, the colored graduate, gave an impromptu oration which called forth genuine applause. Several of the faculty were present and spoke. Prof. John Oehler delivered a very carefully considered address in which he made many amusing references to the members of the class. His speech, he said, was a *Cook*-ed and dried one. He thought it would be *Culp*-able negligence to allow the feast and *Frolsch* to pass without a little friendly advice, and considered it would not be amiss in the wild *Race* for fame and fortune to refer to the need of *Weed*-ing out the *h-Erb* of iniquity. He advised the boys to pass temptation not with the slow and measured steps of a *Muhl*, but rather in the spirit of a prize *Walker*.

Alfonso Dubus, N. Y. C. P. 1890, has favored some of his old friends at the college with his wedding cards which read:

*Alfonso Dubus*

*y*

*Maria Aminta Arzeno*

—

*Se ofrecen a Vd.*

*en*

*su enlace*

*Pto Plata 3 Marzo 1894.*

It is reported that Prof. Chas. Caspari of the Baltimore College of Pharmacy is engaged on a work on pharmacy which will be published by a Philadelphia house.

### Death of Theodore Metcalf.

On April 26 the sad intelligence was received which marked the closing of the career of the Nestor of Boston's drug trade, Theodore Metcalf. It has been said that there was no more familiar figure in Boston than Theodore Metcalf; he had been identified with the drug trade in one location for almost 57 years, which is a record not often paralleled. Until the last four years of his life he devoted his entire time to the details of his extensive business. His name was almost synonymous with the pharmaceutical trade of this city, while its reliability and integrity were unquestioned.

Mr. Metcalf was born in Dedham, Mass., January 21, 1812. He was from old colonial stock, his ancestors having come from England and settled in Dedham in 1684.

At the age of fourteen he went to Hartford, Ct., where he served an apprenticeship of seven years; he remained in that city three years longer and in 1837 came to Boston and engaged in business for himself at 39 Tremont street, his establishment at that time surpassing anything of the kind in the city. While his success was not immediate, he gradually forged to the front, afterwards well maintaining the lead which he had taken.

In 1845 he gave up his business to Joseph Burnett, who had been his assistant for some years. Mr. Burnett kept up the reputation of the establishment until 1855, when he retired, being succeeded by Mr. Metcalf. Thomas Doliber was admitted to partnership about this time and remained in the firm until 1883, when it was dissolved. Mr. Metcalf's next partner was F. A. Davidson, who is still connected with this house. Some years ago a branch store was opened in the Back Bay.

In March, 1887, the 50th business anniversary of Mr. Metcalf was observed by a distinguished party of his friends, who surrounded him at a commemorative banquet given in his honor, and spoke many warm words of cordial appreciation of the personal and business qualities of their venerable guest. Of the party were Dr. Oliver Wendell Holmes and William Warren.

The committee of the dinner consisted of Thomas L. Jenks, Joseph Burnett and Joel S. Orne. In introducing Mr. Metcalf, Dr. Jenks said:

From no like establishment in the country has such an influence gone forth to aid in the advance of pharmacy.

Dr. Holmes made one of the best of his speeches on record, and said that when he started his career as a physician he hung out his shingle almost directly over the sign of the Metcalf establishment, at 39 Tremont street. He said he was as anxious to get a fever as Mr. Metcalf was to get a favor, and that what business they could not attend to between them was looked after by the sexton across the street.

Other speakers were Mayor O'Brien, William Warren, Dr. Henry W. Williams, Dr. Bodfish, Dr. George C. Shattuck, Joseph Burnett, Henry Canning, S. A. D. Sheppard, Albert C. Smith, Frank A. Davidson and Dr. Metcalf, a nephew of the deceased. In the course of the evening letters were read from Governor Ames, Solomon Carter, R. J. Dodge of Dodge and Olcott; John Bullock of Bullock and Crenshaw; E. H. Hazard of Providence; John Boyle O'Reilly, Samuel Colcord, Dover, Mass., and a congratulatory telegram from Lehn and Fink and a cablegram from Morson, London, Eng.

Mr. Metcalf was influential in elevating the position of the pharmacist from the

rank of a tradesman to that of a professional man. The natural result of his persistent and consistent endeavors was the establishment of an immense business. He had the intuitive perception of character which enabled him to surround himself with the best executive ability, and some years ago he associated with himself a number of his leading employees, those in charge of the different departments, and incorporated the Theodore Metcalf Company, of which he was treasurer at the time of his death.

He has been very active, too, in affairs outside of his business, and of a very charitable disposition, and always ready to assist personally and financially all objects of a worthy and charitable nature. Many young men will testify to the great assistance and encouragement given by him which enabled them to prosecute successfully their aims in life.

He was for more than 30 years the treasurer of the Channing Home, the first president of the Boston Druggists' Association, one of the founders of the Amer-



THEODORE METCALF.

ican Pharmaceutical Association, one of the promoters of the Massachusetts College of Pharmacy, a trustee of the City Hospital and of St. Elizabeth's Hospital, and one of the trustees and first presidents of the Catholic Union. For many years and up to the time of his death he was a devout Catholic, a constant attendant at the Cathedral, and an intimate friend of His Grace Archbishop Williams.

He was married in 1864, and leaves beside his widow, a son and four daughters. The Friday prior to his death was his last business day, the fatal illness overtaking him while returning to his home from his day's work.

A special meeting of the Boston Druggists' Association was held on Saturday, April 28, to take action upon Mr. Metcalf's death. Speeches of an appropriate nature were made by President Babcock and Messrs. Rust, Canning, Doliber, Burnett, Tilden, Markoe, Smith and G. D. Gilman.

A committee of three was appointed to draw up a tribute in memoriam, which resulted as follows:

With great sorrow our association is called to lament the sudden decease of its first president, our dear friend and fellow member, Theodore Metcalf. He has passed away after a life of more than four-score years spent, to the latest moment, in active, kindly usefulness.

Theodore Metcalf came to Boston in 1837, bringing with him a thorough knowledge of the drug business and a high ideal of its future. In his quiet, modest way, and by his example and influence he gradually brought about a realization of that ideal; and to him perhaps more than to any other is due the credit for the advancements in pharmacy, the beneficial effects of which are felt and acknowledged in the community to-day. During all this time Mr. Metcalf has held in a marked degree the respect and esteem of all who knew him, not only those of his own profession, but the entire community as well.

It is pleasant for us to remember his high character, his integrity of purpose, his ripe judgment, his extraordinary ability in every duty to which he was called. He made us all his friends, for he carried into every word and act a genial, generous nature, a manly courtesy and a sympathetic, loving heart. He was in the truest and best sense a Christian gentleman, and his memory will be ever held sweet and precious by every member of this association. May his life be to us a perpetual benediction.

We see him as he moved,

How modest, kindly, all-accomplished, wise.

With what sublime repression of himself,

And in what limits, and how tenderly.

We extend to the family our sincere sympathy in a bereavement which is ours as well as theirs.

A general invitation was extended to all of the members to attend the funeral services which occurred at the Church of the Ascension, Brookline, on last Monday. In accordance with the wishes of the family the pall-bearers were selected from the members of the firm of the T. Metcalf Co., and his associates in business, and included: F. A. Davidson, E. W. Shedd, M. F. Lyons, F. C. Montgomery, A. H. Luker and G. T. Brown. The interment was private and took place at Forest Hills.

### Boston Notes.

P. L. M. Gaudett, Salem, is the purchaser of a new onyx fountain from Tufts. It is called the "Farragut."

"Toltec" is the name of the new onyx fountain which Samuel L. Moores, Danvers, has purchased from J. W. Tufts & Co.

T. L. Mills, one of the successful students in our series of questions 1 to 31 is a clerk at J. P. T. Percival's and a student at the M. C. P.

At the recent formation of the Lawrence Druggists' Association, Charles E. F. Clarke and Frank Emerson served as temporary chairman and secretary, respectively. Other speakers beside President Canning were Henry M. Whitney, the oldest druggist of the city, who explained his views upon local organization in strong and emphatic language; and Charles B. Emerson, who is a thorough believer in this idea. Officers were elected as follows: President, Charles E. F. Clarke; vice-president, John H. Cronin; secretary and treasurer, George C. Ketchum. Executive committee: G. H. Perkins, C. H. Beedle, G. C. Frederick, Felix Poisson and G. H. Parker.

The Doliber Goodale Co. consummated an important real estate transaction recently by leasing the large building on the corner of Atlantic avenue and India street. This building is one of the most imposing upon the avenue and is so large that it offers ample room for the increasing business of this concern. It is six stories high, measures 57 feet on Atlantic avenue and 90 feet on India, and borders on a 20-foot passageway. It is exceedingly attractive, having light and air on three sides. The lease is said to be for 10 years, and the removal of this company to this neighborhood will tend to stimulate the movement of the large tract of land adjacent to the new building.

The most of the druggists have pulled through without any trouble and probably the most of them deserved to; the undesirable features of the druggists' end of the liquor business have been pretty well weeded out.—*Lowell (Mass.) Citizen.*

### A Unique Menu.

Messrs. Reed & Co., the popular Danbury, Conn., druggists, gave a banquet on April 19 to the medical profession of Danbury on the issuance of their one hundred thousandth prescription. The menu was something unique. We give it below.

The menu read as follows:

Reed & Company,  
The Prescription Druggists,  
157 Main Street, Danbury, Conn.  
No. 100,000, 4-18-94

**B** Stuffed Clams in Capsules, cum Poma terræ minutatim concisa et cruse tata, Kaltes, shinken mit brot und butter, Salat a la hen cum Vini Xerici, Lingua congelata Americanæ, Vin Portensis, Wine jelly, Fragra et florem lactis, Crackers and cheese, Dulcia, Fructus, Nuccæ, Soda fountain on tap, Cigars.  
M. Ft. emulsio. Sig. To be taken at Reed & Co.'s, 157 Main street, at 12 P.M., Wednesday, April 18, 1894.

(HAS. KERR, House Surgeon.)

### Trade Notes.

If your supply of vaccine points is exhausted this will remind you to write to Dr. Francis C. Martin, Roxbury Station, Boston, Mass., for a fresh lot. See his advertisement in this issue.

There is only one brand of spruce gum advertised to the drug trade which gives universal satisfaction and that is Curtis & Son's "Yankee Brand." Send for a few pounds as a trial order to Curtis & Sons, Portland, Me.

E. E. Dickinson & Co., distillers of witch hazel, Essex, Conn., make exceedingly low quotations on witch hazel in quantities. Dickinson's witch hazel is held in deservedly high esteem for its excellent qualities, and is the kind which gives the best results.

The A. J. Major Cement Co., 282 William street, New York, issue a "Book of Valuable Information" which they offer to send free to any druggist who makes application. It contains a portrait of Alphonse Major, the president of the A. J. Major Cement Co., and illustrations of the firm's exhibit at the World's Fair.

The advertisement of Schering & Glatz, importers of drugs and chemicals, 55 Maiden lane, which appears in this issue, contains a list of new remedies. Some of the substances quoted are often prescribed by physicians, while others are only coming into use. Druggists should make a note of the list for future reference, and write to Schering & Glatz for a supply of literature on the newer remedies for distribution to physicians.

The Springer Torsion Balance Co., 92 Readstreet, New York, have made numerous improvements in their scales, and attention is directed to this fact in the advertisement of the Springer Torsion Balance Co., which appears in this issue. A price list showing a variety of prescription and counter scales as made by this firm

will be sent free on request to any druggist who cares to apply. It will suffice to put your name on a postal card directed to the address given above.

In reference to the article on "Powdered Medicinal Extracts," copied from the *American Journal of Pharmacy* and printed in issue of April 12, it may be proper to state that the samples shown in illustration of the statements contained in this paper were simply types of extracts of various vegetable, so called, drugs. But that though few of the many manufactured, these presented such marked properties in contrast with the usual productions as to merit the closest attention of pharmacists. These extracts are from the laboratory of the Messrs. Wyeth of Philadelphia and demonstrate what can be well done by exact and intelligent method.

### Seabury's Compressed Antiseptics.

The prices of Seabury & Johnson's "Skull and Crossbones" brand of compressed antiseptics have been altered as follows:

Corrosive sublimate,	25 in bottle,	\$2.00 per dozen
"	50 "	1.25 "
"	100 "	6.00 "
"	1000 "	4.50 each

### Ice Cream Soda.

"For ice cream soda use one gallon of good, fresh, sweet milk, five eggs, two tablespoonfuls of cornstarch, and two pounds of sugar. Mix the eggs and sugar thoroughly, and add it to the milk while cold; then apply heat to the whole until the milk begins to simmer—just enough to cook the egg—then cool and freeze."

The above is an excellent recipe for ice cream taken from "Soda Water Syrups," a useful little manual for the soda fountain which Jas. W. Tufts, Boston, is distributing gratis to the drug trade.

### Portable Photographic "Tabloids."

The latest novelty sent out by that enterprising and progressive firm Burroughs, Wellcome & Co., Snow Hill Buildings, London, and 82 to 84 Fulton street, New York, is portable photographic "tabloids." The makers refer to them as a distinct gain over the older methods, though they are not expected to take the place of the ordinary chemicals in constant use in the dark room of the busy professional photographer. They are rather recommended to the professional *en tour*, securing scenery and views, to enable him easily and with little encumbrance to test the exposures he is submitting his plates to when in unknown regions, where the light plays an all-important part, and its varying activity in different districts, if not discovered by trial development, may lead to waste, disappointment and disaster.

To the tyro in photography these "Tabloids" have proven a welcome innovation, since he is enabled to secure success when solutions, from his insufficient knowledge of their constitution and behavior, fail him; and we know of many instances where the amateur photographer, after numerous disappointing failures, found that the first serviceable plate from which good looking prints could be obtained, was the trial one he made when developing with "Tabloids."

## Review of the Wholesale Market.

NEW YORK, May 2, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is no special activity yet noticeable among the importers and dealers in drugs, dyestuffs and chemicals; but the indications are such as to lead those in the trade to look for an expansion in the business volume with the advance of the Spring season. Prices are fairly well sustained in face of the slow sales. Most of the changes toward higher values recorded below are balanced by corresponding declines, the changes in the aggregate being few and unimportant. Opium is in improved position and steady. Norwegian cod liver oil is held with less firmness. Ergot is weaker. Camphor oil has declined.

#### ADVANCED.

Anise oil.  
Balsam Peru.  
Coriander seed.  
Gum benzoin.  
Gum chicle.  
Lycopodium.  
Opium.  
Quicksilver.

#### DECLINED.

Codeine.  
Camphor oil.  
Dragon's blood.  
Saffron.  
Canada balsam fir.

ALCOHOL remains unchanged. Trust quotations are maintained at \$2.18 @ \$2.22 subject to the usual rebate.

BALSAM COPAIBA continues in fair receipt from producing sections and values are steady at the previous range. A lot of Para recently received is held at 35c.

BALSAM FIR, Oregon, continues to offer at 70 @ 75c., though no sales of consequence are reported. Canada is obtainable at \$3.25.

BALSAM PERU from the hands of jobbers is held at \$1.70 @ \$1.75.

BARKS.—There is little of consequence doing in the staple varieties. Cascara is jobbing fairly at 5½ @ 6c. Simaruba has met with some attention and we hear of small sales at 22c. Soap is steady at 3¼ @ 4¼c.

BUCHU LEAVES, short, have continued active though values are easier for ordinary grades and we quote 8 @ 9c.

CODEINE has further declined and manufacturers' prices are reduced to \$4 @ \$4.15 for bulk as to quantity and \$4.25 @ \$4.40 for eighths.

COD LIVER OIL, Norwegian, has remained quiet with, however, numerous jobbing transactions within the full previous range of \$27 @ \$29.

DRAGON'S BLOOD in reeds is in better supply. Holders are now quoting down to 40c.

ERGOT is dull and previous values are quoted nominal.

LYCOPodium is strengthening in tone and the numerous sales of the past few days have resulted in advancing prices, 54 @ 58c. being now required as to brand.

MENTHOL is showing an upward tendency and current transactions have been at the range of \$4.65 @ \$4.75.

OPIUM is showing some signs of improvement owing to the receipt of cables announcing an appreciation in values at primary sources as well as increased purchases for American account; while the advance is generally attributed to speculative influences there is on the whole a fair amount of legitimate interest extended to the drug. Sales of goods to arrive have been made in this market at up to \$2.25 though an advance on this was general at the close. For jobbing parcels the quota-

tion now stands \$2.30 @ \$2.35. Powdered is steady at \$3.20 @ \$3.30.

QUININE continues in steady, fair demand though we hear of no transactions in a large way; and the situation is not expected to show any special change for some little time yet as most of the large dealers appeared to be well stocked. Foreign from the hands of outside dealers can be obtained at 22½c. while manufacturers quote 25 as strictly inside. The nominal range is 23 @ 24c. Domestic is steady at 27½c.

SAFFRON, Valencia, has eased off a trifle and numerous small sales are reported at \$5.40.

TONKA BEANS continue to offer from the hands of jobbers at \$1.80 @ \$2 for Angostura.

VANILLA BEANS continue fairly active with sales at \$6.50 @ \$13 for whole.

#### DYESTUFFS.

CUTCH remains quiet but firm at 5¼ @ 6c. for prime quality in bales, 6¼ @ 7c. for block, and 8¼ @ 9c. for MM slab.

GAMBIER does not meet with much attention, but prices are fairly well sustained at 4¼ @ 4½c. for store goods and 4c. to arrive.

SUMAC, Sicily, continues in fair steady inquiry with the current sales at \$75 @ \$80 as to brand and quantity.

NUTGALLS, Blue Aleppo, are finding sales in small quantities at 13½ @ 14c.

TURMERIC, whole, continues to find a consuming outlet at 5c.

#### CHEMICALS.

ARSENIC, white, has improved since our last report and is now firm at 3¼c.

BLUE VITRIOL continues firm with the current sale at the range of 3½ @ 3¾c.

BLEACHING POWDER does not vary from \$2.12½ @ \$2.25 for German and \$2.25 @ \$2.50 for English with a moderate distribution at this range.

BORAX-continues dull though prices are without quotable change. Refined continues held at 8 @ 8½c.

CHLORATE OF POTASH continues slow of sale but the market continues well sustained upon the basis of 13¼c. for German crystals and 13¾c. for English.

HYPOSULPHITE OF SODA is in limited supply and prices are slightly firmer. Casks are held at \$1.60 @ \$1.65 and kegs at \$1.75 @ \$1.80.

NITRATE OF SODA is firmly maintained at the previous range, the available stock being under good control. Spot quoted \$8.32½ @ \$2.37½, to arrive \$2.30 @ \$2.30 as to date and forward shipments \$1.97½ @ \$2.

QUICKSILVER has advanced in the interval and we now quote 46½ @ 48c.

SAL AMMONIAC, white grain, is less firm and supplies can be obtained down to 6¼c.

#### ESSENTIAL OILS.

ANISE, owing to strong reports from primary markets, is held here with increased firmness and \$1.50 is now quoted firm as an inside price.

CAMPOR OIL has declined and now offers at 5¼ @ 6c.

CASSIA has not changed during the interval; 82½ @ 85c. is asked but the demand momentarily is limited.

CUBEB continues in steady, fair inquiry at the previous range of \$1.45 @ \$1.50.

PENNYROYAL remains quiet without, however, any quotable change in value.

PEPPERMINT continues inactive, transactions being limited by the firm views of holders who do not show any disposition to grant concessions from current values. Bulk is held at \$2.30 @ \$2.60 as to quality and HGH \$2.90 @ \$3.

SASSAFRAS is without change. Recent sales have been made at 36 @ 38c., pure and artificial 25 @ 26c.

#### GUMS.

ALOES, Curacao, are in increased demand and we hear of nothing offering below 3c., which is a slight advance over the previous range.

ARABIC continues in fair inquiry and among other transactions we are reported sales of 75 bags, sorts, at 10c.

ASAFOTIDA has sold in a quantity way at 25c.; there is a fair moderate inquiry at the quoted range of 15 @ 28c. for common and prime.

CAMPOR, domestic refined, offers in instances in a quantity way at 39 @ 40c. for bbls. and cases, but for smaller lots 40 @ 41c. respectively is asked.

CHICLE has met with considerable inquiry of late and prices are marked up to 26 @ 28c.

KINO.—Mastic and Gualac are jobbing moderately and at well sustained values.

SHELLAC has continued in fair, moderate demand and prices are firm throughout with DC quoted 35 @ 36c., VSO 33 @ 34c., SS 30c., and TN 25 @ 26c.

TRAGACANTH.—Aleppo has sold to the extent of some 15 cases on private terms. The quoted range is 32 @ 56c., as to quality.

#### ROOTS.

ALKANET has met with a fair amount of inquiry during the week, and among other transactions we notice sales of some 2,000 lbs. at 6c.

CALUMBA is quiet but steady at the previous range of 5¼ @ 10c.

DANDELION is inquired for and we hear of numerous small sales of German at 7¼ @ 8c.

GINGER, Jamaica, is meeting with steady fair inquiry, and the market is firm at 12 @ 14c. for unbleached and 15 @ 17c. for bleached.

IPECAC is well sustained at \$1.25 @ \$1.40 as to quality, and the requirements of the trade are being met at this range.

JALAP does not vary from 20 @ 23c., and numerous small sales are making at this range.

HELLEBORE, white, has sold to the extent of some 5,000 lbs., the stock changing hands at 4c.

KAVA KAVA continues to meet with steady fair inquiry with the current sales at the range of 16 @ 18c.

#### SEEDS.

ANISE, Italian, is in steady moderate request with the sales at 8¼ @ 10c.

CARAWAY, Dutch, is selling moderately in a jobbing way at 6¼ @ 6¾c.

CELERY is firm at 18 @ 19c. with sales at this range.

CORIANDER has been advanced to 8c. for bleached and unbleached, and only limited parcels can be obtained at this range.

MUSTARD is yet held at 4c., though we hear of small offerings at 3½ @ 3¾c.

POPPY, German, does not vary from 5¾ @ 5½c.

RAPE, German, is firmer, with 2¾c. now quoted as an inside figure.

#### Rhode Island.

F. E. Gilbert of Providence is now proprietor of three stores, having recently opened the third at the corner of Charles and Nichols street. The Low Art Tile Co. supplied this latter store with its soda outfit.

C. E. Welch, Westminster street, Providence, is a recent purchaser of a complete outfit of apparatus for the

charging of soda, which he obtained from James W. Tufts & Co. of Boston. Mr. Welch will use his product over his own counter and he will also cater to the wholesale trade. It will always be charged in one sense of the word, if not in the other.

A beautiful onyx fountain, the "Boston," manufactured by James W. Tufts & Co., adorns the establishment of J. Fred Gibson of Providence.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS WANTED.

SITUATION WANTED—Two A: men want position at the seashore for the season; capable of taking entire charge; New York, New Jersey or Connecticut preferred; salary moderate; first-class reference. Address "Trional," this office.—18.

DRUG CLERK—New York State and Brooklyn licences, German-American, 10 years' experience, low salary, desires permanent position; country or city; reference. Address Pharmacist B, care of this office.—17.

WANTED—POSITION by a graduate N. Y. C. P., aged 29; married; good salesman; temperate; registered in Pa., N. Y. and N. J.; state salary. C. L. Doty, Warren, Pa.

SITUATION AS ASSISTANT wanted by graduate of Ontario College of Pharmacy; Phm. B. of University of Toronto; will go anywhere and accept moderate salary. Address F. W., in care of Duncomb & Frith, 40 Exchange Place, New York.—20.

SITUATION WANTED, preferably in the South, by a able, married clerk; first-class man in every respect; thoroughly posted. Address "Canada," care this office.

POSITION WANTED—A young temperate man, 29 years, wishes a position in drug store in this state; can give good reference. Address "Doctor," 14 Western avenue, Albany, N. Y.—18.

SITUATION WANTED—By a reliable and competent pharmacist; registered in New York State; eight years' practical experience with the retail trade; strictly temperate and can furnish best of reference. Address "Migrine," care of this office.

#### BUSINESS OPPORTUNITIES.

FOR SALE, fountain, all complete; A. D. Puffer make; eight syrups; in good order. W. W. Roberts, Boonville, N. Y.—18.

DRUGGIST WISHES TO RETIRE; rare chance to buy a paying first-class store, Westchester Co., New York. Address Marsh, 87 Hamilton street, East Orange, N. J.—18.

FOR FIFTY CENTS I will send the formula for an elegant cologne very similar if not superior to Hoyt's German Cologne; can be cheaply and easily made. Send to Galen, Jr., 37 College place, New York.

FOR SALE.—Drug store in an Indiana town of 10,000 population; no pharmacy law; invoices \$3,000 to \$4,000; will sell with or without soda fountain; no dead stock; good location on a corner opposite the post-office; reason for selling, have two stores; can reduce the stock if wanted; cheap rent. J. D. Depison, Terre Haute, Indiana.—19.

DRUG STORE FOR SALE—Figures low; good opportunity for a young man. Apply or address Thos. H. Van Horn, 95 and 98 Fulton street, New York, room 5.

FOR SALE—About \$2,000 will buy the only drug store in a nice town of 1,000, with a surrounding territory of 5 miles north, 3 miles south, 10 miles east and 8 miles west; well stocked; cash trade; reason for selling, have two stores; a rare chance for a cash purchaser. Address "Oxalic Acid," care AMERICAN DRUGGIST—20.

#### POSITIONS VACANT.

AGENTS WANTED calling on drug trade to sell my goods from catalogue, as a side line. F. N. Burt, manufacturer druggists' boxes and labels, Buffalo, N. Y.—23.

# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

VOL. XXIV. No. 19.

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WHOLE No. 298.

AMERICAN DRUGGIST PUBLISHING COMPANY,  
37 College Place, New York.  
A. R. ELLIOTT, President.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

ALL efforts to bring JOHN P. PARK & SONS of Cincinnati into line on the rebate plan have heretofore proved futile, but the action recently taken by that firm in bringing suit against the N. W. D. A. seems to indicate that this firm feel the weakness of their position. They claim that they have been practically boycotted. From the opinion recently rendered by H. LA BARRE JAYNE as to the legality of the rebate plan, it would seem probable that PARK's case will have no standing. The outcome of the case will be awaited with profound interest.

## VASELINE vs. PETROLATUM.

THE CHESEBROUGH MANUFACTURING COMPANY of this city, who claim exclusive right to the use of the word "Vaseline" as a distinctive title for certain varieties of petrolatum, have, through excessive zeal in protecting their rights, brought upon themselves the odium of a considerable number of the retail druggists of this city. This is told with emphasis both in the report of Friday's meeting of the New York branch of the Interstate Retail Druggists' League and in the letter of a correspondent which appears elsewhere in this issue.

That the CHESEBROUGH MANUFACTURING COMPANY are perfectly justified in using every legal means to suppress the substitution of fancifully named preparations of petrolatum for "Vaseline" when the last-named substance is specifically called for is of course beyond question. But complaint has been made that agents of the company have, in some instances, wilfully confused the sellers by the form in which they have put the request for supplies. Thus a dealer who is approached with a request for "a five or a ten cent bottle of vaseline, petroleum jelly, petrolatum, or whatever you call it," cannot be blamed if he selects for sale a substance answering to some one of these names and on which he is likely to make the most profit. He would be a poor man of business who would act otherwise.

One member of the New York County Branch of the League complains of having been approached for supplies in this ambiguous manner, and that, notwithstanding the fact that he complied with the request by supplying the company's own product (though in a container of his own), he was the next day served with a notice to appear at the office of the company's attorney to explain his action. In this particular case the company has lost a customer, as he publicly stated his intention at the meeting to keep no more "Vaseline," but in future to refer all customers seeking this article to the drygoods stores.

The attitude which the CHESEBROUGH COMPANY have chosen to adopt in proceeding against those of the trade in this city who have been charged with substituting some other petroleum product for the substance known as "Vaseline" has not been

distinguished by a complete harmony with the circumstances attending the individual cases; and the exercise of a little tact and diplomacy might have averted much of the friction and irritation which have arisen in consequence of the enforcement of measures which have been regarded by many as arbitrary. The only instances in which any tact at all seems to have been exhibited were in those where compromises were effected in consideration of the payment of certain sums of money; and it is here where the pressure has been felt most keenly. For reflection has convinced many who at first consented (willingly, perhaps, from fear of a costly law suit) to part with their cash and to sign an agreement releasing them from prosecution on their promise not to again offend—that the settlement and particularly the cash part of it has not been strictly in accordance with the ordinary rules of legal procedure.

The company meet this with the statement that in all cases where money has been accepted in satisfaction of claims the payment has been used in defraying the legal expenses connected with the commencement of suit. But that such a proceeding was manifestly impolitic it is evident. Dr. FR. HOFFMANN, the editor of the *Pharmaceutische Rundschau*, was no doubt impressed with a conviction similar to ours when he solicited an expression of opinion as to the legality of the company's whole proceedings from a well-known law firm of this city. With regard to the company's action in thus compromising suits, he learned that it did not meet with entire approval.

The action taken on Friday last by the local branch of the Interstate Retail Druggists' League if indorsed by the parent body will prove very damaging to the interests of the CHESEBROUGH COMPANY. It is "carrying the war into Africa," for it consists of nothing less than an appeal to druggists everywhere to place the substance "Vaseline" still further in the background and to bring forward the article bearing the pharmacopoeial title Petrolatum. This is clear from the wording of the resolution, which is as follows:

"Inasmuch as the New York County Branch of the Interstate Retail Druggists' League does not admit that any of its members have substituted Petrolatum for "Vaseline," it is moved as the sense of this



branch that further discussion regarding the advisability of indorsing the action of the CHESEBROUGH MANUFACTURING COMPANY in their attempts to protect their copyright be abandoned; and as a rider to this motion it is further resolved that the New York County Branch request the National body to communicate with the different State Pharmaceutical Associations and the American Pharmaceutical Association advising that petrolatum responding to the tests of purity of the U. S. Pharmacopœia be officially considered equal in every respect to the proprietary substance named "Vaseline," and that the physicians and the pharmacists of the country be so notified through the journals published in their interests."

Things have been shaping themselves to the end foreshadowed in these resolutions for a long time back, but no effort has apparently been exerted by the CHESEBROUGH COMPANY in all the years that have elapsed since "Vaseline," was first placed upon the market to secure the interested co-operation of pharmacists in pushing the sale of their goods.

It is a unique preparation indeed which can be sold to the public as a medicinal agent without the support of pharmacists. The experiment has been tried over and over again but has met with uniform failure. Sooner or later those compounds which are advertised as possessing peculiar medicinal properties find their way with the great bulk of nostrums into the hands of ignorant dealers who are only interested in the profits—pecuniary and advertising—which attend their sale, and it would seem that "Vaseline" is now on its way there.

### MORE TARIFF CHANGES.

THE compromise amendments to the tariff bill as reported by the Senate Finance Committee were finally decided upon on May 7.

The changes proposed to be made by the compromisers in the measure originally reported from the Finance Committee so far as they relate to drugs and medicinal chemicals are as follows:

Boric acid, changed from 10 per cent. ad valorem to 5 cents a pound.

Chromic acid, from 30 per cent. to 4 cents a pound.

Citric acid, increased from 20 per cent. to 25 per cent.

Tannic acid, or tannin, increased from 35 cents a pound to 75 cents.

Tartaric acid, increased from 20 to 20 per cent., the rate in the House bill.

A new provision is added after paragraph 8, "alumina," etc., to read as follows: "Ammonia, carbonate of, 20 per cent.; muriate of, or sal ammoniac 20 per cent.; sulphate of, 20 per cent."

"Refined borax, 20 per cent.," is changed to read, "Borax, crude, or borate of soda, or borate of lime: 2 cents a pound; refined borax, 2 cents a pound."

A new paragraph is inserted placing a duty of 10 per cent. on camphor, refined.

Iodoform is restored to the House bill provision, \$5 a pound instead of 25 per cent.

Magnesia, carbonate of, medicinal, changed from 30 per cent. to 3 cents a pound, as in the House provision. Calcined is restored to the House provision of 7 cents a pound instead of 30 per cent. and a new paragraph added. "Sulphate of, or Epsom salts, 3 of a cent a pound."

Flaxseed or linseed and poppy seed oil, raw, boiled, or oxidized, increased from 15 cents a gallon to 20 cents. House bill, 15 cents.

Olive oil, fit for salad purposes, changed from 25 per cent. to 35 cents a gallon, to correspond with the House bill.

Peppermint oil increased from 20 per cent. to 25 per cent. as in House bill.

All coal tar colors or dyes, by whatever name known, and not specially provided for in this act, changed from 20 to 25 per cent.; House bill, 20 per cent.

A new paragraph is added, reading as follows: "Drugs, such as barks, beans, berries, balsams, buds, bulbs, bulbous roots, excrescences, fruits, flowers, dried fibers, dried insects, grains, gums and gum resin, herbs, leaves, lichens, mosses, nuts, roots and stems, spices, vegetables, seeds aromatic, seeds of morbid growth, weeds and woods used expressly for dyeing; any of the foregoing drugs which are not edible, advanced in value or condition by refining or grinding, or by other process of manufacture, and not specially provided for in this act, 10 per cent ad valorem."

Ethers, sulphuric, increased from House provision of 35c. per pound to 40c.; spirits of nitrous ether, increased from House provision of 20c. per pound to 25c. per pound; fruit ethers, oils or essences, increased from the House provision of 5c. per pound to 75c. per pound.

In the paragraph relating to gelatine, prepared fish sounds, etc., the word "prepared" is stricken out.

The paragraph relating to opium now reads: "Opium containing less than nine per centum of morphia, and opium prepared for smoking, \$6 per pound; but opium prepared for smoking and other preparations of opium deposited in bonded warehouse shall not be removed therefrom without payment of duties, and such duties shall not be refunded."

Hydriodate, iodide, and iodate of potash changed from 10 per cent. to 25 cents a pound, as in the House bill.

Nitrate of potash, or saltpeter, refined, changed from 10 per cent. to 1/2 cent a pound, to correspond with House bill.

Preparations used as applications to the hair, mouth, teeth or skin, such as cosmetics, dentifrices, pastes, pomades, powders, and all toilet preparations, and articles of perfumery, not specially provided for in this act, changed from 30 per cent. ad valorem to 40 per cent. as in the House bill.

Fancy, perfumed and all descriptions of toilet and medicinal or medicated soap, increased from 30 to 35 per cent., to correspond with House bill.

Bicarbonate of soda or supercarbonate of soda, or saleratus, changed from 30 per cent. ad valorem to 1/2 cent a pound, as in House bill.

Hydrate of, or caustic soda, changed from 25 per cent. ad valorem to 1/2 cent a pound, as in House bill.

Bichromate and chromate of, changed from 20 per cent. ad valorem to 2 cents a pound; House bill 20 per cent.

Sal soda, or soda crystals, changed from 20 per cent. to 1/2 of 1 cent a pound, as in House bill; soda ash changed from 20 per cent. to 1/4 of a cent, as in House bill.

Silicate of soda or other alkaline silicate, changed from 20 per cent. to one-quarter cent per pound, as in the House bill.

Strychnia, or strychnine, and all of its salts changed from 30 per cent. to 30 cents an ounce; House bill, 30 per cent.

Refined sulphur is made 20 per cent. and stricken from the free list.

Tartrate of soda and potassa, or Rochelle salts, changed from ten per cent. to 2 cents per pound; House bill, 10 per cent.

Alcoholic perfumery, including Cologne water and other toilet waters, and alcoholic compounds not specially provided for in this act, \$5 per gallon and 50 per cent. ad valorem, the 50 per cent. being substituted for 25 per cent., which appears in both bills.

Licorice, extract of, in paste, rolls, or other forms, has been increased from 4c. to 5c. per pound, as in the House bill.

Morphia, or morphine, and all salts thereof have been reduced from 75c. (House bill) to 50c. per ounce.

Phosphorus changed from 25 per cent. to 15 cents per pound.

Prussiate of potash, red or yellow, increased from 20 per cent. to 25 per cent.

The paragraph relating to medicinal preparations and proprietary preparations, taxed at 50 cents per pound, has added to it the words "medicinal coal tar preparations."

The influence of special interests on the bill are to be observed in the larger number of the changes made. Crude boric acid and borates, for instance, which were originally on the free list are now to pay one cent a pound, which will confirm the California borax monopoly in their control of this market. The assessing of a duty on refined camphor shows that our domestic refiners are feeling the competition from the Japan refined article, etc. The commercial world feels convinced that on the whole greater damage will result from delay than from any modification of the bill which may be made. Since the changes, however, affect individual interests and arouse individual action, while delay causes merely general protest, the probabilities of an early passage of the measure remain dubious.

### THE A. P. A. PROCEEDINGS.

THE bound volume of the Proceedings at the forty-first annual meeting of the American Pharmaceutical Association for 1893 together with the Annual Report of the Progress of Pharmacy has just been sent out by the Association. In this volume we have an index of the recent work in pharmacy, materia medica and chemistry which for accuracy and completeness of reference stands without a rival. The labor involved in preparing a reference work of this kind is indeed great and of a character which cannot be adequately remunerated by merely pecuniary compensation. Mr. KRAEMER, the reporter on the Progress of Pharmacy, will find his best recompense in the satisfaction which attends all work worthily performed. A fuller notice will be published later.

THE comparative dullness of the drug trade during the past year is shown in the fact that the value of the imports of drugs and chemicals into the United States for the nine months ending March 31, 1894, amount to but \$19,631,911 as compared with \$26,288,000 during the same period of the year 1893, a falling off of \$8,656,089, or nearly twenty-four per cent. It is true that there has been a slight gain in the exports of domestic drugs during the same period, but this is so small a gain (some \$400,000) as not to materially affect the deductions to be drawn from the decrease in the imports.

Written for the  
American Druggist and Pharmaceutical Record.

## SILVERING GLASS.

BY GALEN, JR.

Much has been written on this subject and there seems to be no end of formulas published. Many of the formulas are little better than chemical curiosities, while others are so complicated as to make it impossible for the ordinary person to prepare them.

Some years ago the writer began a systematic investigation of this subject to settle in his own mind whether it were practical for this work to be done with the ordinary appliances of the shop. And with no claims for originality in the matter only that the formula has been considerably modified and the process perfected, the process given below is offered as one that will give good results if care is used and the detailed instructions given are followed. The solutions are easily prepared, are found in every drug store and will do their part of the work perfectly if given the chance.

In plating with silver it is necessary that the glass be absolutely clean, as any dirt or organic matter will bring the silver down brown or black, and in making mirrors this will be found the main difficulty. Great care should be used to avoid scratching the glass, as every scratch shows very plainly in the mirror. In my own experience where a mirror has become damaged it is impractical to attempt to repair same because it will not only be found impossible to properly clean all the portions of the glass desired, but a line will always be left between the old and the new plate.

It must not be supposed that any piece of glass will take a good plating of silver and make a mirror, because it will not. Some glass will make a blurred, whitish deposit in spite of anything that can be done. And of course such glass is useless for the purpose. To clean a glass chemically clean is not an easy task and yet this must be done before success can be attained.

With a suitable glass properly cleaned no trouble will be found in plating it nicely by the formula here given. But the work that is done outside of regular mirror works is generally repairing old and damaged mirrors and to resilver them. And to this we will turn our attention. It is first necessary when a mirror is to be repaired to take off the old back and plate, and in order to do this properly a person must be able to tell whether the back is a mercury amalgam back or a silver one.

We know that it is one or the other; if it is an old style, unpainted amalgam back it is easily told. But if it is a German painted back amalgam mirror it will be necessary to try a little nitric acid to see if it gives nitrous fumes. If it does this to any extent it is an amalgam back. If neither of these, then it is a silver back, and this it generally is if painted.

In the unpainted amalgam backs the coating can be removed by using a flat piece of soft wood sharpened on end like a putty knife. Then having removed all that can be done with the wood the glass is rinsed off thoroughly and nitric acid poured over same. This will remove any small pieces that may remain. This should be thoroughly rinsed off and the glass then covered with a coating of prepared chalk and water and allowed to dry. This is rubbed off with clean cloths free from grease and the glass thoroughly rinsed with clean water. Do not allow the hands to touch glass while cleaning. If this is carefully done the glass will be perfectly clean and

ready for plating. Some use a putty knife to clean off amalgam, but there is great danger of scratching the glass.

With the painted mercury backs the paint should be removed by using wood alcohol or something similar that will dissolve it, and then the coating can be easily taken off by careful rubbing, using some patience and not getting into a hurry. It should be treated exactly as in the first case to clean.

In the painted or silver-back mirrors the glass is leveled up in a suitable place and covered with nitric acid, which is allowed to stand from 12 to 18 hours. At the end of this time the back can easily be removed. The glass should then be thoroughly rinsed and cleansed as above.

Silver back glasses are much the easier to clean because nitric acid will remove the silver and paint and do no harm, while with mercury backs it should not be used because it heats the glass so much as to be liable to crack it, and it sometimes spoils the finish of the glass. I have dwelt on this subject at considerable length for it is an all important one in making or repairing mirrors. For if the glass is not properly cleansed the mirror will be imperfect.

Having our glass now in a condition to be plated we will next consider the solutions which are necessary to do the work, and will for the purpose of designating them call the solutions No. 1 and No. 2.

### SOLUTION NO. 1.

Silver nitrate.....	20 grains
Strong ammonia.....	sufficient
Distilled water.....	sufficient
Alcohol.....	1 fl. oz.

Dissolve the silver in 6 fluid ounces of distilled water and add ammonia gradually until the brown precipitate at first formed is just dissolved, no more. In order to guard against an excess of ammonia it is always best to add a little solution of silver nitrate (16 or 18 grs. to an ounce of distilled water) to the ammoniated silver solution until the solution is permanently turbid again. Then filter through a double paper filter, turning back till it comes through clear and add distilled water through filter to make 12 ounces; add 1 ounce alcohol, place in a clean bottle and shake thoroughly and cork. Place in a cool dark place.

### SOLUTION NO. 2.

Rochelle salts.....	12 grains
Silver nitrate.....	16 grains
Distilled water.....	sufficient
Alcohol.....	1 fl. oz.

Dissolve the rochelle salt in 8 ounces of distilled water-place in a clean porcelain or porcelain-lined evaporating dish and raise to a boil. When boiling gently add while constantly stirring with a glass rod the silver nitrate dissolved in one ounce of distilled water and continue to boil gently until the solution which will turn brown and then black turns gray. Then continue boiling for a minute or so longer and add 3 ounces of distilled water and filter, making up to 12 ounces through the filter with distilled water. Place in a clean bottle add one ounce of alcohol and shake thoroughly, cork tightly and keep in cool dark place.

These solutions should be allowed to stand at least five or six hours before using. The glass having previously been cleaned is now leveled above any suitable support so that none of the pieces used to level come out to the edge of glass. It should then be rinsed thoroughly with distilled water and the water tipped off the glass. Then mix equal parts of No. 1 and No. 2 solutions and pour the mixture on the glass as long as it

will hold it. Any air bubbles should be broken down with the glass rod by touching them, and the solution made to cover the glass perfectly out to the edges. Allow to stand for an hour or more then tip off the solution and rinse with clear water and before drying amalgamate with solution of cyanide of potassium and mercury made as follows:

### SOLUTION NO. 3.

Cyanide potash.....	8 grs.
Cyanide mercury.....	16 grs.
Water.....	sufficient

Dissolve the salts separately in 8 fluid ounces of distilled water and add to sufficient distilled water to make one gallon.

Place this in a sprinkler and sprinkle the silver covering until it begins to change color (lighten to about a lead color), then rinse immediately and thoroughly with water and stand on end to dry. When dry examine the face of the mirror to see if the plating is perfect, and if so paint it with asphaltum varnish, using a smooth soft brush, which will not scratch the plate. The fingers must not touch the silver before it is painted or it will leave a mark.

If these directions are followed a good mirror will be the result, but in this, as in everything else, it will be found easier after some practice.

If the weather is too warm the solution should be cooled by setting the bottles in cold water and pouring cool distilled water over face of the glass in order to cool it, otherwise the solution will throw down the silver so rapidly as to make it bothersome in getting the solutions on the glass fast enough. If both solutions and glass are at about 60° or 70° Fahrenheit no trouble will be experienced from that score.

The most scrupulous cleanliness must be observed in everything. It is well to make the solutions as wanted. And the amount needed can be easily estimated by pouring all the water on the leveled glass it will hold and noting the amount.

In plating very small mirrors for ophthalmoscopes, etc., it is always better to allow them to stand in alcohol after cleaning until ready to plate them. When ready to plate place the mirror in a small evaporating dish, with the side of the glass uppermost on which the deposit is desired. Then mix equal parts of Nos. 1 and 2, and pour over the glass in the dish until it is covered. Then clean off the other side, as a deposit will be found on both sides. Amalgamate and finish as directed above.

In working with the above solutions it is always best to have them cool enough, so that the whole amount of solution needed can be poured on the glass before it begins to deposit. In small glasses this is of no consequence, but in larger ones it is. The amalgamating solution is used for the purpose of making the plate more permanent; and this it does, for a certain amount of the mercury instantly forms an amalgam with the silver and lightens the mirror in color and makes the plate more adherent to the glass. The process is simple, but some practice is necessary to do nice work on larger glasses.

### FOR INVETERATE SYPHILITIC NEURALGIA.

[Prof. OBOLSKY.—*Sem. Med.*]

Fowler's solution.....	1 gramme or gr. ʒ
Tincture of gelsemium comp.	10 grammes or fl. ʒ 3
Distilled water.....	150 grammes or fl. ʒ 5

Take three tablespoonfuls daily, the specific antisyphilitic treatment being of course continued at the same time.

## Pharmaceutical Progress.

The decomposition of nitrous ether can be reduced to a minimum, says Meldrum, by the addition of at least 20 per cent. of glycerin.

**Kneipp's Flour.**—This, according to *L'Union Pharmaceutique*, is composed of:

Iron lactate.....	1.00
Manganese lactophosphate.....	0.50
Calcined hartshorn.....	100.00

**Paramannan** is a new carbo-hydrate isolated by Gilson from *Coffea arabica*. It occurs in white, light micro crystalline powder insoluble in water and alkaloids and easily soluble and concentrated sulphuric acid. On boiling with acids it is converted into mannose.

**Acetone-Resorcin** is a chemical combination of 2 molecules of resorcin with one molecule of acetone. Mix 1 part of resorcin with 2 parts of acetone, add 1 part of fuming hydrochloric acid and an oily product separates, which, when properly purified, yields water free prismatic crystals insoluble in water, alcohol, ether and chloroform but soluble in alkalies (*Zeit. de Allge. Osterr. Apoth. Ver.*)

**The Tannin of Tea.**—A. Hilger and Fr. Tretzel have studied the chemical characters of this constituent of tea, in regard to which very discordant account have been given by various authorities (*Forsch. Ber. u. Lebensmitte*). In order to obtain a pure product, green tea was operated upon by first extracting with boiling water, evaporating the clear liquor to the consistence of a thin syrup, and then shaking with acetic ether which had been digested with magnesia. The ethereal solution containing tannin, together with chlorophyll and products of its alteration, was then distilled, the residue treated with water, and on evaporating the clear water solution the tannin was obtained perfectly free from ash. It presented the appearance of a chocolate brown powder, readily soluble in water, alcohol, acetone, or acetic ether, sparingly soluble in ether, and insoluble in chloroform. The water solution gives with ferric chloride a deep blue coloration, with gelatin solution a precipitate. Elementary analysis and the behavior of the acetyl compound of this tannin show that it has the composition and general characters of an anhydride of digallic acid, and not those of a glucoside. By long continued action of dilute sulphuric acid, the tannin of tea is converted into gallic acid and a phlobaphen.

**Myrica Nagi.**—David Hooper, quinologist to the government of Madras, India, calls attention (*Am. Jour. Pharm.*, April) to the large percentage of tannin present in *Myrica Nagi* Thunberg, which he thinks is identical with Shibuki, a Japanese tree, the bark of which was found by J. Ishikawa (*Chem. News*, Dec., 1880, p. 275) to contain from 11 to 14 per cent. of tannin. A sample of this bark, Kaiphal, from Bombay contained 11 per cent. of moisture and yielded 7.17 per cent. of ash. Estimated in the manner above mentioned, for tannin, it afforded 13.7 per cent. The lead compound of the organic acid contained 30.72 per cent. of oxide, a result which compares very closely with the amount found in the compound separated from the "Kino," namely, 31.88 and 30.86 per cent. in two estimations. The tannic acid, separated from the tincture by evaporation and treatment with water, gives a bluish-purple color with ferric chloride, but on adding this reagent to a decoction of the bark a dirty green precipitate is formed. Beyond determining the amount of tannic acid in an authentic specimen of this bark, and obtaining indi-

cations of an alkaloidal principle, Mr. Hooper has not had opportunity for further examining the drug. It may on closer research be found to contain interesting crystalline principles, such as those recently separated from its neighboring plants, species of the *Ficus* and *Casuarina*.

## Automatic Pipette.



The following description of an automatic pipette is due to Emil Greiner, of this city, its inventor and manufacturer, to whom we are indebted for the illustration.

This, in its construction, does away, not only with all danger in its use, but which makes the measuring of the liquid instantly effected by the filling operation. The upper stem of an ordinary pipette terminates in a contracted nozzle, somewhat bent over; from this upper nozzle to the lower one it holds the exact quantity for which it is marked. A second glass bulb fastened air-tight to the upper stem of the pipette is fitted with an India-rubber bulb at its upper extremity. To use it the bulb is squeezed, the lower end of the pipette is placed in the liquid, and the bulb released from pressure. As it expands the liquid rises in the pipette until it overflows from the upper end. When the bulb has fully expanded, the overflow ceases, and on removal from the liquid the pipette is accurately filled. Its contents can then be delivered as desired by squeezing the rubber bulb. For the photographer it is admirably adapted, supplying him with an accurate measure of volume, instead of the grossly inaccurate graduate so generally used.

## Extract of Ergot.\*

By C. C. KELLER.

The formulas for the preparation for the extract of ergot in almost all the pharmacopoeias are based upon the preparation made by J. Bonjean in 1842 and termed by him ergotin, which, however, contained only very small quantities of the active alkaloids of ergot. The principal constituent of these extracts of the pharmacopoeias is ergotinic acid, a body which is decomposed in the digestive tract and becomes active, but which when brought into the circulation direct exercises an entirely different action from that desired.

Powdered ergot is more active than the extract, for, in the preparation of the latter, no care is taken to extract the alkaloid with alcohol. The second edition of the German Pharmacopoeia even directs the treatment of the finished extract with alcohol and this alcoholic solution of the only active alkaloidal constituent is then thrown away; whereas, in the third edition, this error is corrected by a return to the formula of Bonjean.

\* Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD from the *Apotheker Zeitung*.

The method of the third edition of the Swiss Pharmacopoeia, which was worked out by the writer, may, on the other hand, be considered as an attempt to solve the ergotin question from the present standpoint of our scientific knowledge of the question and more particularly on the basis of the work of that prominent pharmacologist Robert of Dorpat. That this experiment is successful is shown by the experience of the writer covering several years.

One thousand parts of ergot are dampened uniformly with 500 parts of diluted alcohol and allowed to stand for twelve hours in a well covered vessel. The moist powder is passed through a sieve and fully exhausted in a percolator with diluted alcohol. If the percolation is properly conducted this is accomplished when the percolate amounts to about four to five times the weight of the ergot. The percolate is now evaporated to 250 parts in a vacuum, if possible, and with constant stirring. Now add 250 parts of water, warm for a short time and allow to cool, when oily and resinous masses will separate out. Filter and to the clear dark reddish-brown filtrate add 50 parts of 10 per cent. hydrochloric acid. Shake up the liquid and allow to stand for 24 hours. The sclererythrin, the coloring matter of ergot, will then separate out in a flocculent precipitate. Now filter and wash and to the filtrate add 20 parts of crystallized sodium carbonate. When the evolution of carbon dioxide ceases evaporate to 150 parts; finally add 15 parts of glycerin and evaporate to 125 parts. One part of the extract now represents eight parts of the ergot. It is of a thin, almost liquid consistence.

According to the Swiss Pharmacopoeia the aqueous solution of the extract (1 to 20) should be of a reddish-yellow color. Extracts which are not prepared according to the above formula yield a dark brown solution. If three cc. of this solution of the extract is diluted with 7 cc. of alcohol the mixture should remain perfectly clear even after standing some time. Other extracts will yield a precipitate. The aqueous extract should turn litmus paper to a light red (alkaline solutions are easily decomposed). On the addition of iodide of mercury and potassium no muddiness should follow. An excess of acid causes pain when the solution is injected. If Mayer's reagent be mixed with a solution of the extract and hydrochloric acid added a copious yellowish-white precipitate would form (extracts not made according to this formula yield dark precipitates).

Ten cc. of the extract solution (1 to 20) on being acidified with 5 drops of diluted hydrochloric acid and on addition of one cc. of picric acid solution (1 to 150) should become muddy at once and yield a flocculent precipitate after a few minutes. This reaction is a direct and approximately quantitative test of the quantity of the active alkaloid of ergot present, since the flocculent precipitate yielded from a preparation prepared carefully according to the Swiss Pharmacopoeia consists practically of cornutine picrate. The ergotinic acid and its decomposition alkaloids are not precipitated under these conditions. Only an ergot rich in alkaloid and an extract carefully prepared will show the reaction indicated. The cornutine in the precipitate can be identified by the usual test after having been isolated by means of hydrochloric acid, ammonia, etc.

For hypodermic use the following solution is recommended:

Extract of ergot (as above).....	Parts-50
Sterilized water.....	25
Glycerin.....	25

One part of this solution represents four parts of ergot. The writer is unable to confirm the view of Kobert that all extract solutions lose their activity in a relatively short time, since I have found the proportion of cornutine present in a fluid extract made from a Spanish ergot unchanged after many years.

The writer finds only traces of cornutine in Bonjean's extract. Of three commercial ergotines intended for hypodermic injection two were found to be alkaline and the third strongly acid, two contained no cornutine at all and the third only traces thereof.

Aided by the investigation of the properties of cornutine it has recently become possible to prepare an extract of ergot which while free from ergotinic acid, still contains the total amount of alkaloid in a relatively very pure form. Investigations as regards the action of such preparations, its uses and clinical applications, etc., are now in progress.

### Zinc Pastes.

Hodara, a Turkish naval surgeon, has examined a number of zinc pastes and states that the essential features of such a paste are that they should have a low melting point, but still should congeal rapidly at a comparatively high temperature and should have a strong contractile force. He has determined these factors in the following preparations:

#### GELATINA UNNA.

(Unna's Gelatin Paste.)

	Parts.
Gelatin.....	15
Water.....	40
Glycerin.....	15
Zinc oxide.....	30
Melting point, 46° C. Congealing point, 28° C. Contractility, 6½ mm. (in a strip 10 cm. long).	

#### GELATINA MOLLIS MIELCK.

(Mielck's Soft Gelatin Paste.)

	Parts.
Gelatin.....	15
Water.....	45
Glycerin.....	25
Zinc oxide.....	15
Melting point, 40° C. Congealing point, 28° C. Contractility, 5 mm.	

#### GELATINA DURA MIELCK.

(Mielck's Hard Gelatin Paste.)

	Parts.
Gelatin.....	30
Water.....	40
Glycerin.....	25
Zinc oxide.....	13
Melting point, 46° C. Congealing point, 32° C. Contractility, 6 mm.	

#### GELATINA MOLLIS BEIERSDORF.

(Beiersdorf's Soft Gelatin Paste.)

	Parts.
Gelatin.....	10
Water.....	40
Glycerin.....	40
Zinc oxide.....	10
Melting point, 41° C. Congealing point, 28.5° C. Contractility, 2 mm.	

#### GELATINA DURA BEIERSDORF.

(Beiersdorf's Hard Gelatin Paste.)

	Parts.
Gelatin.....	15
Water.....	35
Glycerin.....	40
Zinc oxide.....	10
Melting point, 44° C. Congealing point, 30° C. Contractility, 5 mm.	

#### GELATINA DURA UNNA.

	Parts.
Gelatin.....	30
Water.....	30
Glycerin.....	30
Zinc oxide.....	10
Melting point, 57° C. Congealing point, 40° C. Contractility, 4 mm.	

A very wide difference is shown in the four different kinds of paste in respect to

their melting point, congealing point and contractility, this fact being due to the variation in the composition of the different preparations. The amount of glycerin varies very widely. In order that the paste should not congeal too slowly Hodara advises the use of about 12½ per cent. of gelatin and 5 per cent. of glycerin. These proportions can only be used, however, where the preparation is to be used at once.

In the preparation of a permanent article for sale in the trade which must be capable of standing for some time without decomposition, the glycerin contents must be increased to as much as 12½ per cent. The proportion of zinc oxide should be 20 per cent. throughout. Hodara gives the following formula for soft paste:

	Parts.
Distilled water.....	55
Gelatin.....	12.5
Glycerin.....	12.5
Zinc oxide.....	20

This paste melts at 37.75° C., congeals at 28° C. and possesses a contractility of 16 mm. (for a strip 10 cm. long inside of five days).

For hard paste with high contractility and the lowest possible melting point Hodara commends the following:

	Parts.
Distilled water.....	50
Gelatin.....	15
Glycerin.....	10
Zinc oxide.....	20

This paste melts at 38.75° C., congeals at 31° C. and has a contractility of 22 mm. If the paste is wanted to be less contractile it is advisable to use 15 parts of glycerin and relatively smaller quantity of zinc oxide. The melting points by this change are reduced to the lowest possible point, 38.05 C. and 38 C.

### Terebene.\*

BY H. W. JAYNE, PH.D.

The pharmacopœia of 1890 requires that a pure terebene should have a specific gravity of 0.862 at 15° C., and boil between 156° and 160° C. In a paper read before this society in 1887 (*American Journal Pharmacy*, 1887, p. 65), I showed that a pure preparation contains no fraction below 160° C., and the same conclusion was reached by Power and Kleber (*Phar. Rundschau*, January, 1894).

Since 1887, I have examined a very large number of samples, and have found that all really pure and inactive terebenes gave no fractions under 165°, and very few, if any, under 170°. In these samples I have also found a wide variation in specific gravity. When we consider the difference in the gravity of commercial oil of turpentine and note that the pharmacopœia does not require the turpentine used in manufacturing terebene to have a certain gravity, it is to be expected that the resulting preparations should show widely different gravities.

Experience has shown that terebene is approximately 0.02 lighter than the turpentine from which it has been made.

Some grades of undoubtedly pure oil of turpentine show very low gravities.

Recently a shipment of oil of turpentine was received, having a gravity of only 0.855, yet was without doubt pure, tests failing to show any adulteration.

A large quantity of this oil was treated as usual, with small quantities of sulphuric acid in successive portions, samples being taken after each addition. The following table gives the results of each test, and clearly shows how the gravity falls and the

boiling-point rises as the product becomes more inactive. The first column shows the gravity of the mixture of terebene, colophene, etc., before distilling with steam.

	Gravity before distilling.	Gravity after distilling.	Rotation for 10 c. m.	Percentage distilling to									
				100°	165°	170°	175°	180°	185°	190°	195°	200°	
Original t'pentine	0.86	0.855	10° 45'	38	76	84	88	90	94	94	94	94	..
After first acid....	0.88	0.852	9° 42'	18	64	80	85	88	90	93	93	93	..
After second acid....	0.90	0.843	5° 52'	10	46	70	80	86	92	92	92	92	..
After 3d acid....	0.92	0.840	2° 7'	6	15	58	80	85	88	93	93	93	..
After 4th acid....	0.93	0.840	0° 16'	2	13	60	75	84	87	92	92	92	..
After fifth acid....	0.94	0.835	0° 4'	8	16	58	78	82	86	89	89	89	..

The crude terebene so obtained was then distilled to remove the higher boiling portions.

Examinations of commercial terebenes show that many of them contain a large percentage of oil of turpentine, yet they appear to be satisfactory to the medical profession.

If a terebene containing a small amount of turpentine gives satisfactory results, it appears useless to prepare a perfectly inactive article, for the yield is then very small and the cost of production correspondingly high. A terebene containing only 3 per cent. of turpentine, on being treated to render it inactive, showed a loss of 50 per cent.

### Treatment of Vomiting of Pregnancy.

Lutaud (*Revue Obstetricale et Gynécologique*, February, 1894) states that vomiting of pregnancy is best treated by cocaine. The action of this drug is often strengthened by combining it with antipyrin. Thus, the following prescription:

Chlorhydrate of cocaine.....	gr. iss
Antipyrin.....	gr. xvi
Distilled water.....	3 iv

Sig.: 1 teaspoonful every half hour until vomiting ceases.

If the stomach will not tolerate this quantity of liquid, 10 drops of a one and a half or two per cent. solution of cocaine are administered, repeated at one or two hour intervals.

At times the application of cocaine to the os is extremely valuable. The following prescription may be used:

Hydrochlorate of cocaine.....	gr. xvi
Extract of belladonna.....	gr. iv
Vaseline.....	ss

Cotin's method of dilating the os with the finger sometimes causes immediate cessation of vomiting. Occasional success will follow Routh's procedure, which consists in exposing the uterine neck by means of a speculum and painting with tincture of iodine. In cases of moderate severity the following mixture will be found serviceable:

Tincture of iodine.....	3 ii
Chloroform.....	3 ii

Sig.: 5 drops night and morning at meal-times, taken in seltzer water.—*Therapeutic Gazette*.

Guaiacol in Diabetes.—Clemens (*Allg. med. Centr. Ztg.*, No. 22; *Wien. med. Pr.*, No. 20) speaks favorably of the action of guaiacol in the treatment of diabetes. The dose employed was from six to ten drops, three times a day, in a tablespoonful of milk or cod-liver oil.

\* Read at a meeting of the Philadelphia College of Pharmacy.

### Kings County Pharmaceutical Society.

At the April meeting held on Tuesday the 10th ult. one member was elected to membership and two others proposed. Delegations were present from several societies of physicians and others interested to witness an exhibition of the advance in scientific skill in handling electricity, brought about in the last few years. J. Wesley Allison, president of the Automatic Telephone & Electric Co., and sole licensee for the Stringer automatic switch for New York State, was present, and showed the high efficiency and lesser cost of the new systems. Metallic currents (two complete wires) are used similar to "long distance telephones," but the "Central" as ordinarily understood is done away with, which to subscribers has always been a nuisance. By a most simple and ingenious device each subscriber is his own "Central," calls up the number wished for direct without delay. Two subscribers talking can arrange the wire to "private," and converse with absolute secrecy. The switch room for 100,000 instruments need not be more than 25 feet square, as the automatic switch for ten thousand will stand in a quart measure, and the only necessity of the room is that two men shall be on duty continuously to see that the switches are clean and in good working order. In case of an accident to one, another can be connected in five seconds and the line scarcely disturbed. Induction from other electric lines, as "trolleys," is no greater than with the present long distance, since both systems are two-wire, and not a "grounder." The new company expect to handle 15,000 connections in Brooklyn and 80,000 in New York City, and extend still further as required. At present they are prohibited from using the "long distance" circuit, but by a law existing in nearly every State in the Union any other company will receive and transfer messages, for upon this basis only are telegraph or telephone franchises allowed. The exhibit proved extremely interesting and was examined by all present. Many prominent physicians were in attendance and took part in the discussion which followed.

A paper was read upon Pill Excipients particularly directed toward handling creosote, and a portion of the formulas are here given:

I.  
Cera flavæ.....gr. x  
Creosoti.....gr. xxx  
Pulv. glycyrr. rad.....gr. xiv  
M. ft. pill No. xx.

II.  
Creosoti.....gr. xxx.  
Magnes. calc.....q. s. fiat massa  
M. ft. pill No. xx.

III.  
Creosoti.....gr. xxx  
Sapo pulv.....q. s. ft. massa  
M. ft. pill No. xx.

IV.  
Gelatinum.....Parts.  
Sacch. alba.....11  
Aqua.....5  
Of this keep as a jelly in stock.

V.  
Gelatinum compound.....gr. xv  
Creosoti.....gr. xxx  
Ext. glycyrr.....q. s.  
M. ft. pill No. xx.

VI.  
Balsami tolu.....gr. lx  
Creosoti.....gr. xxx  
Powd. glycyrr. rad.....gr. lxxx  
M. ft. pill No. xx.

### VII.

Benzoin pulv.....gr. xx  
Aqua.....q. s.  
Creosoti.....gr. xxx  
Fiat emulsio et adde  
Pulv. glycyrr. rad.....gr. lxx  
M. ft. pill No. xx.

From these the speaker chose as best the benzoin process, saying that with gelatine they keep well and disintegrate readily in the stomach, but were difficult to make. Soap did fairly well. Calcined magnesia did not dissolve entirely, apparently from a chemical combination. Bread crumb, which was also tried, was a total failure as far as covering creosote was concerned; those made by tolu balsam were too large.

The samples, as examined by the audience, seemed the finest from benzoin and from gelatin.

Professor De Forest said that those made by gelatin were certainly handsome and gave but little smell of creosote.

Professor Schimpf spoke in behalf of the benzoin emulsification, considering it superior to any method out, being easily and readily worked, instead of requiring great skill and care. The pills could be turned out quite small, held the medication exceedingly well, and kept their shape. Of the creosote to be used take two-thirds that weight in benzoin, and use a little liquorice to mass. Gelatine finished well, but was about like india rubber to roll out, yet if time could be spared it was undoubtedly a good plan for stock to keep on hand.

The method of Deiterich did very well except regarding size of the finished pill.

### DEITERICH'S FORMULA.

Creosoti.....gr. xxx  
Glycerinal.....gr. iv  
Pulv. ext. glycyrr.....gr. xxx  
Fiat emulsio et adde  
Pulv. rad. glycyrr.....gr. xliiv  
M. ft. pill No. xx.

Wm. Werner said that magnesia was not an available medium for the purpose here desired. He had, however, been much pleased with the following:

### WERNER'S FORMULA.

Boraci pulv.....Grammes.  
Benzoin.....5.500  
Benzoin.....5.000  
(In select whittetears powdered at the time of using.)  
Creosoti.....10.000  
Glycerin q. s. et fiat emulsio, et adde  
Pulv. rad. glycyrr. q. s. ft. mass (about) 15.000  
M. ft. pill. No. c.

(Each containing 10 cg. of the material wished for.)

He had found that powdered roasted coffee made a good conspergent very nearly obliterating the peculiar odor. He had found the gelatine process could be worked with comparative ease if both mortar and pestle were kept warm while making the mass.

Mr. Lohness had been very successful with glycerin starch and tragacanth.

Mr. Pfeiffer said that in his hands powdered althea and soap suds do good work.

Mr. Bliss often used bismuth and sugar of milk in equal quantities, packing dry in capsules, and then before capping adding, by means of a dropper, one minim of creosote to each. This plan had pleased his physician very much.

Questions were asked as to the best excipient for quinine, considering convenience at the counter, appearance, softness upon keeping and disintegrating quality.

Professor De Forest preferred glycerite of starch, possibly because he was well used to it.

Mr. McElhennie employed glucose dextrin (yellow) and glycerine in about equal proportions, and diluted as necessary with water, the main disadvantage arising from a slight color given to the pills.

Mr. Stevens said glucose alone was more in use for large work than any other, meeting all the requirements as stated, keeping color and shape, and yet easily crushed under the finger and going to pieces quickly in water, the thick, water-white variety being selected of about the consistency of glycerin.

President Brundage, in absence of Dr. Hunt, who had expected to present a paper with microscopic accompaniment, read a short paper entitled "The College and the Drug Clerk," and after a little routine business the meeting was adjourned.

### Abstracts from the Sixth Edition of Deiterich's Pharmaceutical Manual.\*

#### CENTRIFUGAL SEPARATORS.

Centrifugal separators have long been indispensable in large factories for separating solid bodies from liquids. In sugar refineries the crystallized mass is put in the centrifugals, the sugar separated from the molasses, and the crystals washed free of the mother liquor by adding a little water at a time.

The centrifugal consists of a so-called "running drum" which is surrounded by an immovable cover, the collecting drum. The power for the pharmaceutical centrifugal is applied from below in order that the contents of the machine may not be contaminated by any drip of oil from the driving gear.

The running drum is perforated like a sieve and is used either as it stands or with a piece of more or less fine sieve cloth laid inside of it according to the character of the substance on which it is to be used. The collecting (exterior) drum is connected with an outlet tube through which the separated liquid is led away.

In using the centrifugal sudden or backward movements are to be avoided, as these are injurious to the machine and also retard the work. The machine is set in motion slowly and steadily, the speed being gradually raised and the movement being allowed to die out of itself after the process is completed. The contents should also be put in carefully and as evenly distributed as possible, as otherwise the strain will be uneven to the detriment of the machine and of the work.

In separating precipitates, crystals, etc., from the mother liquor, the desired equal distribution may best be attained by mixing up the sediment and liquid well and pouring it slowly into the centrifugal while it is running at full speed.

If it is proposed to use the centrifugal to the full capacity the liquid should be gradually poured in as long as it does not slop over the edge of the revolving drum. In the same way the wash water is gradually poured in when the mother liquor has been drawn off.

The centrifugal may be dispensed with in the manufacture of extracts, as for this purpose it cannot compete with a good press, as by the use of the latter a larger yield may be obtained. There is this to be said, however, that the drug is so much crushed by the first pressing as to interfere with a second extraction.

On the other hand the centrifugal works much easier and more rapidly than does the press and for this reason there is

\*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.



room for a much more general application of the centrifugal in operating on a small scale for the extraction of liquids up to a certain point.

The first runnings from this machine are apt to be muddy even when a cloth has been laid inside the revolving drum, but if this be poured back into the drum in a thin stream, while it is turning, a clear filtrate can nearly always be obtained, the residuum accumulating on the inner walls of the revolving drum and thus form a filter bed and clear the liquid. So far as my experience goes the centrifugal is of greatest value where both the solid and the separated liquor are of some value. It is less useful where either of these is worthless.

The centrifugal finds a further application recently in the analysis of urine and in bacteriological and food analyses, and in other examinations in order to clarify liquids which are difficult to filter or which contain a precipitate from which the fluid cannot be readily separated. For this there are special attachments which can be screwed on to the laboratory centrifugal. By this means the precipitate is generally so thoroughly separated from the liquid that the latter can be drawn off with a pipette. Washing is accomplished by then adding water and again centrifugalizing the liquid. Such work is best accomplished by means of a machine which is capable of attaining a very high speed.

In purchasing such a machine great care should be exercised to obtain one durably constructed and in which the sieve drum is well tinned, as otherwise the pleasure derived from its use is but short-lived. The bearings being so much used it is very important that they be kept well oiled.

#### CHARTA SALICYLIC.

(Salicylic Paper.)

	Grammes.
Liquid paraffin.....	50
Solid paraffin.....	50
Salicylic acid.....	1
Thin absorbent paper sufficient.	

Melt the paraffin together, rub up the acid well and add it to the mixed hot paraffin and in this mixture soak strips of thin white absorbent paper. This is useful for chafed feet.

Strips of this paper should be laid between the toes and over any chafed places on the feet. The feet must be washed daily with warm water and fresh strips of the paper laid on.

#### Pyrotechnic Formulas.

##### FLASH POWDER.

Flash powders serve for theatrical purposes and are also particularly valuable as a source of light for instantaneous photography. Since the mixtures explode on concussion the materials should be mixed immediately before being used, by means of a piece of card or paper. Small capsules can also be made of from one-half to two grammes (7 to 80 grains) capacity, paper saturated with nitrate of soda or potash being used as an envelope for the capsule or cartridge. When this is done it is only necessary to apply a match to the exterior of the cartridge to set it off.

	Grammes.
(a) Potassium permanganate in number 50 powder.....	40 (617 grains)
Magnesium, number 30 powder.....	60 (926 grains)
(b) Aluminium in number 30 powder.....	30 (462 grains)
Antimony sulphide in number 30 powder.....	15 (232 grains)
Potassium chlorate in number 30 powder.....	65 (1,080 grains)

Both mixtures are very satisfactory in operation.

#### Varnishes, etc

##### CELLULOID VARNISH.

	Grammes.
Pyroxylin (soluble gun cotton).....	5 (5 grains)
Ether.....	47 (47 grains)
Alcohol, 95 per cent.....	45 (1 fl. dr.)
Camphor.....	3 (3 grains)

Pour the ether over the pyroxylin, add the alcohol and finally add the camphor.

This varnish may be colored by the addition of anilines. It is particularly adapted for covering paper labels.

##### RUSSIAN FURNITURE VARNISH.

	Grammes.
Shellac.....	500 (500 grains)
Rosin.....	13 (13 grains)
Absolute alcohol.....	50 (500 grains)
Turpentine.....	40 (40 grains)
Powdered talc.....	30 (30 grains)

Warm the shellac and rosin, add the absolute alcohol and finally the turpentine and talc. Shake for several minutes vigorously and stand in a cool place. After eight days filter through a filter which has been previously wetted with alcohol.

##### GELATINA ZINCI CARBONATI.

(Zinc Carbonate Gelatin.—DRETERICH.)

	Grammes.
Zinc sulphate.....	30 (3 ounces)
Sodium carbonate.....	30 (3 ounces)
Glycerin.....	40 (4 ounces)
Gelatine.....	10 (1 ounce)
Distilled water, sufficient quantity.	

Dissolve the zinc sulphate to a clear solution in 200 grammes (20 fl. ounces) of distilled water. Dissolve the sodium carbonate in 200 grammes (20 fl. ounces) of distilled water, filter each solution, mix and wash the resulting precipitate until free from sulphate. Place this in a cylindrical vessel, the bottom of which is covered by a linen cloth. Allow to drip and pour the glycerin upon the precipitate. Collect the liquid that drips off and use this to swell the gelatin. Now weigh the mixture of glycerin and precipitate, also weigh the gelatin solution, mix the latter with the precipitate, warming gently, and lastly add sufficient distilled water to make the whole weigh 100 grammes (10 ounces).

##### GELATINA ZINCO THIOLI.

(Zinc Thiol-Gelatin.—DRETERICH.)

	Grammes.
Thiol liquid.....	10 (150 grains)
Gelatine.....	15 (225 grains)
Zinc oxide.....	15 (225 grains)
Glycerin.....	25 (375 grains)
Distilled water.....	35 (525 grains)

##### GLACIALIN.

(Milk preserving powder.)

	Grammes.
Boric acid, powdered.....	40 (600 grains)
Sodium bi-carbonate.....	60 (900 grains)

Add one gramme (15 grains), as much as would be held on the point of a small table knife, to one quart of milk, then boil the milk for at least a quarter of an hour.

##### PURIFIED ALCOHOLIC EXTRACT OF LIQUOR ICE.

(E. DRETERICH.)

	Grammes.
Russian liquorice, coarsely powdered.....	1,000 [3 xxxii]
Alcohol, 90 per cent.....	1,000 [3 xxxviii]
Water.....	sufficient

Pour 5 kilogrammes [10½ pints] of cold water over the liquorice, allow to stand for four hours stirring frequently and then press out. Extract the press cake with 8 kilos [3½ pints] of boiling water and again press out. Mix the two liquid extracts and at once.

Evaporate to 500 grammes (16 ounces) and add to the solution while hot one kilo. (38 fluid ounces) and allow to stand for 24 hours. Then filter through paper and from the filtrate distill off 900 grammes, 20½ fluid ounces. Evaporate the residue to a medium thick extract consistence. The extract is completely soluble in water.

The yield is about 180 to 200 grammes (8 to 6½ ounces). It is necessary, particularly in summer, to perform the operation rapidly; by beginning at 6 in the morning one can be ready by midday to go on with the evaporation and the alcohol can be added by evening.

##### EXTRACTUM ROSARUM SPIRITUOSUM.

(Alcoholic extract of rose.—DRETERICH.)

	Grammes.
Rose leaves, cut moderately coarse.....	1,000 (32 ounces)
Diluted alcohol, 68 per cent.....	5,000 (8 fl. ounces)
Glycerin.....	sufficient.

Pour the diluted alcohol on the rose leaves and allow it to stand at 15 to 20 degrees C. (60 to 68 degrees F.) for twenty-four hours, express and evaporate the resulting fluid 500 grammes (16 ounces). Allow the evaporated extract to stand for 24 hours at the room temperature, filter and evaporate the filtrate to a syrupy consistence. Then add sufficient glycerin to bring the whole up to 250 grammes (8 ounces). Of this extract, which is clearly soluble, 25 grammes is sufficient to make one kilo of honey of rose (mel. rosatum).

#### Treatment of Eczema.

Klotz, in the course of a paper (*Therap. Gaz.*) upon the principles of antiseptics in the treatment of eczema, holds that it is well to begin by producing thorough disinfection of the affected surfaces. Thus, after removal of crusts with water and soap, the part should be washed with corrosive sublimate not stronger than 1 to 3000 or 1 to 5000. This solution is used hereafter morning and night by means of a pad of absorbent cotton, and, if possible, this pad, well soaked in the solution, is to be kept applied to the diseased surfaces from half to one hour during each washing. The parts are then dried, and a ten per cent. boric acid vaseline ointment is rubbed into the skin and covered with a cotton bandage. In a few days all supuration ceases. In milder cases two or three per cent. boric acid lotion takes the place of the corrosive sublimate. In acute inflammatory cases, especially when the legs are involved, with or without ulcers, 2 to 4 parts of acetate of lead are added to each 4000 parts of boric acid solution, and compresses soaked with this mixture are constantly applied for several days. Even in the dry forms of eczema these wet applications are of service.

Petrilli warmly recommends zinc sulphate as an external application in the treatment of eczema, basing his favorable opinion upon a number of reported cases in the *Archiv. für Dermatologie und Syphilis*, Bd. xxvi, Heft 3.

**Creosoted Solutions of Sodium Salicylate.**—Dr. A. Müller states (*Sem. Med.*) that the best method of making patients tolerate sodium salicylate consists in administering it in a solution to which a little creosote wine has been added. This is said to not only render the salicylate palatable but also to prevent the digestive troubles which frequently follow its administration.

**For Pruritus Ani.**—A Russian physician, Dr. A. Berger, recommends the following: Saturate a cotton pledget three-quarters to one and one fourth inches long with a two per cent. solution of hypochlorite of lime, introduce this into the anus and withdraw as soon as a slightly smarting sensation is experienced. Then wash the anal region with the hypochlorite solution taking care not to wipe off. If the itching recurs repeat the treatment.

### Cream of Tartar Trees.

Nature's laboratory is ceaselessly working, developing and storing up products for the use of mankind at large. In the vegetable kingdom this is especially noticeable; and if man sometimes only succeeds, after much experiment in work, in making the plant give up its useful properties, at other times—and these are of frequent occurrences—he finds the product already manufactured and requiring but a small amount of preparation to render it fit for utilization. To this latter category of plants yielding ready-made products the cream of tartar trees (*Chambers' Journal*) may be said to belong; they are members of the genus *Adansonia*, of the natural order *Bombacæ*. Until within the past few years it was thought that only one species could rightly claim the title of the cream of tartar tree, the *Adansonia Gregorii*, the gouty-stem tree of Northern Australia. Recent researches have, however, proved that the Baobab (*Adansonia digitata*) of Senegal contains nearly 2 per cent. of free tartaric acid and nearly 12 per cent. of bitartrate of potassium. The acid is found in the farinaceous pulp surrounding the seed, and has at all times been highly esteemed by travelers, who mix it with a little water in order to make a refreshing beverage.

Dr. Duchassaing some years back recommended that the bark should be used medicinally in the place of cinchona bark, but for some reason his suggestion was never followed up. The bark contains a remarkably strong fiber, which in some parts is made into ropes, and in others woven into cloth. Experiments have been made in this country with a view of utilizing it for paper. All who tried it agreed that the bark possessed magnificent properties, but it cannot be imported in sufficiently large quantities to make it of any commercial interest.

A bitter principle, to which the name of Adansonin has been given, is extracted from the bark. It appears in fine white needles of a small similar to that of aloes or gentian, and is extremely bitter in taste. It is interesting from the fact that it is the only product known up to the present that has an antagonistic action to the *Strophanthus* arrow poison, a deadly poisonous seed used by the natives on the west and east coasts of Africa to insure their arrows inflicting a fatal wound. Although both *Adansonia* and *Strophanthus* grow in the same vicinity the natives seem to be unaware of the antidotal properties of the former.

### Sympathetic Inks.\*

Sympathetic or secret ink may be defined as "any liquid with which we may write invisible letters that will not appear until some particular agent is employed to give them color." There are several varieties, requiring different treatment—one merely needing exposure to the air; another to fire; a third, the application of a certain vapor; and so on. Ovid, in his "Art of Love," teaches young women to deceive their guardians, by writing their love letters with new milk, and to make the writing appear by rubbing coal dust over the paper. Any thick and viscous fluid, such as the glutinous and colorless juices of plants, aided by any colored powder, will answer the purpose equally well. A quill pen should be used. The most common method is to pen an epistle in ordinary ink, interlined with the invisible words, which, doubt-

less, has given rise to the expression "reading between the lines" in order to discover the true meaning of a communication.

Letters written with a solution of gold, silver, copper, tin, or mercury dissolved in aqua fortis, or, simpler still, of iron or lead in vinegar, with water added until the liquor does not stain a white paper, will remain invisible for two or three months if kept shut up in the dark; but, on exposure for some hours to the open air will gradually acquire color, or will do so instantly on being held before the fire. Each of these solutions gives its own peculiar color to the writing: gold, a deep violet; silver, slate; lead and copper, brown; but all possess this common disadvantage—that in time they eat away the paper, leaving the letters in the form of perforations. There is a vast number of other solutions that become visible on exposure to heat, or on having a heated iron passed over them; the explanation being that the matter is readily burnt to a sort of charcoal, simplest among which we may mention lemon juice or milk; but the one that produces the best result is made by dissolving a scruple of sal-ammoniac in two ounces of water.

Writing with rice water, to be rendered visible by the application of iodine, was practised successfully in the correspondence with Jelalabad in the first Afghan war. The letter was concealed in a quill. On opening it, a small paper was unfolded on which appeared the single word "Iodine." The magic liquid was applied and therewith appeared an important dispatch from Sir Robert Sale.

In the course of a trial in France last year, a letter was read from a man named Turpin, a chemist, under sentence of five years' imprisonment as a spy, giving directions to a friend with a view to establishing a secret correspondence with him while in prison. This led to an official inquiry on the subject by the French authorities, and some strange revelations were obtained from some of the convicts. It appears that when information has to be conveyed to a prisoner, a formal letter containing apparently nothing but a few trivial facts of a personal nature, is forwarded to the prison. This is read by the governor, who stamps it, and allows it to be handed on to the man to whom it is addressed. The latter, however, is aware that there is another letter to be read within the lines, this being written in milk, and being easily decipherable on being rubbed over with a dirty finger.

Perhaps the most dangerous of its kind is one that was described in a French scientific journal at the beginning of 1888, at least it might prove so in unscrupulous hands. It consists of an aqueous solution of iodide of starch. In four weeks, characters written with it disappear, preventing all use or abuse of letters, and doing away with all documentary evidence of any kind in the hands of the recipient. But a recent discovery by Professor Braylants of the University of Louvain, surpasses all inasmuch as no ink at all is required in order to convey a secret message. He lays several sheets of note paper on each other, and writes on the uppermost with a pencil, then selects one of the under sheets on which no marks of the writing are visible. On exposing this sheet to the vapor of iodine for a few minutes it turns yellowish and the writing appears of a violet brown color. On further moistening the paper it turns blue and the letters show in violet lines. The explanation is that note paper contains starch, which, under pressure, becomes hydramide and turns blue in the iodine fumes. It is best

to write on a hard desk, say a pane of glass. Sulphurous acid gas can make the writing disappear again, and it can be revived a second time.

By digesting zaffre in aqua regia, by which is obtained the calx of cobalt, we get a secret ink by means of which pretty scenic effects may be produced. It was thus described many years ago by Macquer, known as the author of the "Chemical Dictionary": "This ink may be applied to the drawing of landscapes, in which the earth and trees, destitute of verdure, being drawn with common ink, give a prospect of winter, and which may be made to assume the appearance of spring by exposure to a gentle heat, which covers the trees with leaves and the earth with grass by rendering visible those parts of the landscape which are drawn with this sympathetic ink; and as the solution of regulus of cobalt or zaffre in spirit of niter acquires a reddish color by the application of heat, the red solution might be contrived to represent the fruits and flowers."

### Linnaeus Hampered by the Clergy.

In a letter to Eloius, Linnaeus tells of the rebuke given to science by one of the great Lutheran prelates of Sweden, Bishop Svedberg. From various parts of Europe detailed statements had been sent to the Royal Academy of Science that water had been turned into blood, and well-meaning ecclesiastics had seen in this an indication of the wrath of God, certainly against the regions in which these miracles had occurred and possibly against the whole world. A miracle of this sort appearing in Sweden, Linnaeus looked into it carefully and found that the reddening of the water was caused by dense masses of minute insects. News of this explanation having reached the Bishop, he took the field against it; he denounced this scientific discovery as "a Satanic abyss" (*abyssum Satanae*), and declared "The reddening of the water is not natural," and "when God allows such a miracle to take place Satan endeavors, and so do his ungodly, self-reliant, self-sufficient, and worldly tools, to make it signify nothing." In face of this onslaught Linnaeus retreated; he tells his correspondent that "it is difficult to say anything in this matter," and shields himself under the statement "It is certainly a miracle that so many millions of creatures can be so suddenly propagated," and "it shows undoubtedly the all-wise power of the Infinite."

The great naturalist, now grown old and worn with labors for science, could no longer resist the contemporary theology; he settled into obedience to it, and continued to adhere to the doctrine that all existing species had been created by the Almighty "in the beginning," and that since "the beginning" no new species had appeared.—*From Theological and Scientific Theories of an Evolution in Animated Nature*, by Dr. ANDREW D. WHITE, in *the Popular Science Monthly* for May.

### How Menhaden Oil and Guano are Made.

The process of extracting the oil from the menhaden is very simple. When the fish is delivered at the factory it is immediately placed in large iron tanks containing about a foot deep of water. Heat is then applied until the mass begins to simmer, when the heat is turned off. In this way the fish is thoroughly steamed, and

\**Chambers' Journal*.

the oil cells are more or less separated from the flesh, so that the oil can be readily and thoroughly released in the presses. Often, when the fish is rich in oil, a considerable quantity exudes during the steaming process. This is drawn off from the top of the simmering mass and runs in troughs to the oil tank.

After the steaming, the fish is placed in "curbs" (circular vessels having perforated bottoms) and rolled to the oil presses. Here the oil is released by hydraulic pressure, and the remainder is simply the nitrogenous part of the fish, which is called "scrap."

In the factories of the United States Menhaden Oil and Guano Association the oil is not rectified; it is expressed in the simple manner that I have explained, and then shipped to the different oil merchants and refineries of the United States and Europe.

The preparation of the scrap, or fish guano, is also very simple. After the oil is released the solid matter is taken to the drying boards—a large field covered with closely fitting grooved and tongued flooring—upon which it is spread to dry. At Tiverton the drying field comprises nearly twenty acres. From first to last the greatest care is taken that no foreign substance shall become mixed with it. When it is sufficiently dry it is bagged for transportation, either to the manufacturer of artificial fertilizers or direct to the farmer. The total quantity of menhaden "scrap" manufactured during the nineteen years from 1874 to 1892 inclusive was 912,467 tons (dry and acid), and the amount made from other non-edible fishes and waste fish in the United States is estimated at 150,000 tons.—From *Economic Uses of Non-edible Fish*, by R. F. WALSHE, in the *Popular Science Monthly* for May.

## Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Home Study in Pharmacy.** H. M.—We would recommend you to procure a copy of Oldberg's *Home Study in Pharmacy*. This has the advantage over any other book that we know of in this line, in that it combines in one volume an elementary treatise on Botany, Pharmacy, Chemistry and Physics so far as they touch upon the work of a drug store. We would suggest that you purchase this volume and each week write out to the best of your ability the answers to the questions which are propounded in the Quiz Box of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD, and that after you have written out these answers to the best of your ability you look through your book of reference and try to correct the answers, or if you prefer you can write out the answers and send them to the editor of the Quiz Box and look for the correct answers some weeks later. In the meanwhile study Professor Oldberg's work systematically as suggested by him in the introductory chapters of the work. For more advanced study there are of course a large

number to choose from, the names of the more valuable being given each week in the Quiz Box.

**Paine's Celery Compound.** J. R. P.—We published a formula in our issue of April 19 which is said to give a preparation closely resembling the original. The formula referred to contains no narcotics.

**Acid Phosphates.** C. E. R.—"A good working formula" for acid phosphates will be found in the National Formulary under the title "Liquor Acidi Phosphorici Compositus." A solution can be prepared extemporaneously as follows:

Potassium phosphate.....	10 grains
Magnesium phosphate.....	20 grains
Sodium phosphate.....	10 grains
Calcium phosphate.....	30 grains
Orthophosphoric acid.....	2 fl. ounces
Water, enough to make.....	1 pint

**Malvina Cream.** W. L. P.—The *New Idea* examined this some time ago and commented upon it as follows: Put up in a white glass ointment jar containing 886 grains of a white pleasant appearing and pleasant smelling ointment, which consists of white wax, white petrolatum, a bismuth salt, and mercuric chloride in very small quantities. We recommend the following formula as one which will make a preparation closely resembling the original:

White petrolatum.....	265 grains
White wax.....	50 grains
Spermaceti.....	30 grains
Bismuth oxychloride.....	40 grains
Mercuric chloride.....	1 grain
Spirit of rose (4 drams of oil to 1 pint)	50 minims
Oil of bitter almonds.....	10 minims

Warm the petrolatum, white wax, and spermaceti together until melted. While cooling incorporate the bismuth oxychloride and the mercuric chloride, this last previously dissolved in a little alcohol and when nearly cold stir in the perfumes.

**Malvina Lotion.** W. L. P.—This is said to be an emulsion of almond (2 drams to 1 pint) with rose water, containing oxide of zinc in suspension and about 1 part of corrosive sublimate in every 4,000 parts of the finished mixture. A formula might be constructed from the above as follows:

Mercuric chloride.....	2 grains
Zinc oxide.....	3 drams
Emulsion of almonds.....	1 pint

**Witch Hazel Extract.** P. R.—The formula given below has been recommended:

Lanolin.....	4
Petrolatum.....	4
Witch hazel water.....	2

**Elixir of Bark, Iron, Pepsine, Bismuth and Strychnine.** F. W. L.—Formula No. 46 in the National Formulary is intended to furnish a preparation of the kind mentioned. It is composed of

Citrate of bismuth and ammonia.....	128 grains
Strychnine sulphate.....	1/4 grains
Water, hot, a sufficient quantity.	
Elixir of cinchona and iron enough to make.....	16 fl. ounces

Dissolve the bismuth salt in half an ounce of hot water, allow the solution to stand until any undissolved matter has subsided, then decant the clear liquid and add to the residue enough water of ammonia to dissolve it, carefully avoiding an excess. Dissolve the strychnine sulphate in one fluid drachm of hot water and having mixed the two solutions, add enough elixir of cinchona and iron to make sixteen fluid ounces.

**Elixir of Cinchona and Iron.** F. W. L.—This is made as follows:

Iron phosphate.....	256 grains
Water boiling.....	1 fl. ounce
Detannated elixir of cinchona, enough to make.....	16 fl. ounces

Dissolve the iron phosphate in the boiling water, then add enough detannated elixir of cinchona to make sixteen fluid ounces and filter.

**Chemical Combustion.**—A. M. D. writes: Please inform me what chemical or combination of chemicals is it which takes flame on the addition of a drop of sulphuric acid."

A mixture of potassium chlorate and cane sugar, equal parts, in fine powder.

**Elixir of Gentian and Iron.** W. E. G.—Try the formula given in answer to query of P. T. in issue of April 12.

**Toothache Wax.** A. W. W.—We print below a formula which has been used with good results by many of our old subscribers.

Paraffin wax.....	94 grains
Burgundy pitch.....	30 minims
Oil of cloves.....	30 minims
Creasote.....	30 minims

Melt the first two ingredients and when nearly cool add the oil of cloves and creasote, stirring well. This may be made into small pills or sent out in form of small cones or cylinders.

Another method is to incorporate about 2 per cent. of carbolic acid with a sufficiency of molten paraffin wax and saturate absorbent cotton with the mixture.

**Rat Poisons.** L. P. W.—We give below a selection of formulas, some one of which may meet your requirements:

### ARSENIC DOUGH FOR RATS.

	Grammes.
Wheat flour.....	1,500.00 (48 ounces)
Indigo powder.....	15.00 (231 grains)
Arsenic in fine powder.....	1.25 (19 grains)
Oil of anise.....	1.75 (25 min.)

### ARSENIC RAT POWDER.

	Grammes.
Oatmeal.....	500.00 (16 ounces)
Powdered sugar.....	125.00 (4 ounces)
Arsenic, in fine powder.....	30.00 (1 ounce)
Old cheese.....	30.00 (1 ounce)
Oil of anise.....	5 drops
Tincture asafoetida.....	5 drops

### PHOSPHORUS PASTE NO. I.

Phosphorus.....	1 part
Water at 40° C.....	16 parts
Molasses.....	8 parts
Lard.....	16 parts
Oatmeal, sufficient to make a paste.	

### PHOSPHORUS PASTE NO. II.

	Grammes.
Phosphorus.....	4.75 (65 grains)
Hot water.....	25.00 (6 drachms)
Melted butter.....	30.00 (1 ounce)
Wheat starch, enough to make a paste.	

### RAT PILLS.

	Grammes.
Barium carbonate (precipitated).....	100.00 (3 1/2 ounces)
Bread crumbs.....	50.00 (1 1/2 ounces)
Cheese.....	50.00 (1 1/2 ounces)
Oil star anise, enough to flavor.	

Make 100 pills and place where rats or mice can get at them.

### MINERAL RAT POISON.

	Grammes.
Barium carbonate (precipitated).....	125.00 (4 ounces)
Powdered sugar.....	175.00 (5 1/4 ounces)
Oatmeal.....	175.00 (5 1/4 ounces)

Mix. Flavor with a mixture of oils of caraway and anise.

**Chinese Ginseng.**—A recent issue of the Chinese court circular, the *Pekin Gazette*, contained several notes of articles for the Emperor's personal use. One is from Ch'ang Shun, Tartar General and Military Governor of Kirin, who reports that he has received from the ginseng hills of Kirin some specially fine ginseng, superior to any ever obtained before for royal use. He says he has ready for shipment eight roots of No. 1 size and fourteen roots of middle size, the whole weighing 8 1/2 ounces. It is packed in two boxes, and cost \$1,752.25. The precious roots are to be sent in care of a hereditary noble who will be responsible for safe carriage.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in this issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent will be published each week.

Address Editor Quiz Box, 37 College place, New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

IN submitting answers to the questions care should be taken that the name of the student be affixed thereto. Several sets of papers have been received without any adequate means of identifying them, and as a consequence the authors have received no credit for their answers. This point should be carefully noted, as, owing to the large number of papers which must be examined each week, it is almost impossible to identify the papers after they have once reached the hands of the editor of this department.

The last four questions of the fifth series of questions seem to have been slightly misunderstood by many students. They all read "Name two kinds of fruits." Many have construed them as though they read "Name two indehiscent (or other) fruits," and instead of naming a kind or form have named an individual fruit as an example. A full and correct answer to the 67th question, "Name two kinds of indehiscent fruits," would be: The caryopsis or grain as in wheat, etc., and the drupe, as in the peach, are both indehiscent fruits. A somewhat similar error was fallen into, though only by a few, in answering the questions 65 (5), "Name four varieties of racemose inflorescence," and 66 (6), "What is a cyme." While the correct naming of four examples of racemose inflorescence would not be counted as a total failure it would not by any means be a full and correct answer to the question. Many students fail to receive full credit for the knowledge which they possess, because on examination they do not take sufficient pains to assure themselves that they correctly understand the questions asked.

This point is one of great practical importance to the student, hence our desire to impress it strongly on the minds of our readers.

A few students also delay sending their answers beyond a reasonable time.

## Answers to Questions; Fifth Series.

1. The stem is that portion of the plant bearing leaves or some modification of them. Its functions are to support the leaves and thus expose them to light and air; to bear the flowers and to convey nourishment to all parts above the ground; to take the materials absorbed by the roots to the leaves for digestion, purification and assimilation.

It differs from the root also in being a leaf-bearing, regularly branching and apex and internodular growing structure.

The root is that part of the plant which does not bear leaves, is usually subterranean, and thus holds the plant securely in place and gives it the power to absorb food. Roots are irregular in branching, less complicated in structure, never directly bear leaves, and the tip or apex is not itself the growing point, but is pushed forward by a growing layer from behind.

2. Bulb, corm, tuber and rhizome, although found below ground, are not roots but subterranean or scale stems. They all represent stores of starch and other food for the use of the plant at the beginning of a new period of growth.

The bulb is a very short (almost globular) erect stem, provided with roots, covered with fleshy scales, which represent the undeveloped leaves, and from the intersection of these scales terminal buds may develop and rise into the air as leaves or flowers. Bulbs are of two classes—scaly, like the lilies, where you can split the bulb into many clove like pieces, or tunicated, where we find layer within layer as in the onion.

The corm is a very broad, solid, erect stem having thin scales for its covering, and producing buds upon its upper and lateral surface and is intermediate between the bulb and the tubes. The crocus is a corm.

The tuber is a thickened portion of an otherwise threadlike, subterranean stem. It stores such an enormous supply of food as to become misshapen and of large size. Upon its surface are numerous little depressions (eyes) consisting of a scale and a bud in its angle or axil; any one of these buds or eyes may develop. Thus we may cut a tuber into any number of pieces, and as long as each one has an eye it can develop a complete plant. The white or Irish potato is a most valuable tuber.

3. Rhizome, sometimes called creeping stem and root-stock, is a stem running beneath the ground, it has its internodes partially developed and at each node are scales which may produce leaves (or shoots) for the upper air and roots for the soil. The nodes developed each year finally lose their vitality and wither away leaving a scale or scar to mark their former location. Any part of a rhizome, including a node, if cut away from the main part is able to produce a new plant; ginger and calamus are rhizomes.

4. A stolon is an aerial stem which bends to the ground and where it comes into contact throws out adventitious roots, thus converting the shoot into a new plant. Strawberry plants multiply thus. We can artificially produce the same effects by covering a portion of a branch with moist earth.

5. Racemose, indefinite or centripetal inflorescence includes the raceme, umbel, corymb, spike, spadix.

6. Cyme illustrates the determinate inflorescence, like the corymb it forms a

level topped flower cluster, but is made so by the unfolding of terminal buds, while the corymb is produced by the axillary buds.

The outer flowers of a corymb open first and the flowering moves toward the center and is therefore centripetal or indeterminate. The central flowers of a cyme are first opened and the flowering is toward the circumference and is called determinate or centrifugal.

7. Indehiscent fruits are the drupe and berry, as in the plum and grape.

8. Dehiscent fruits: capsule (poppy) and legume (senna fruit).

9. Fleshy fruits: pome (apple) and pepo (cucumber).

10. Dry fruits: nut or glans (beech nut) and Key fruit or Samara (maple).

## Names of Students whose grade stood 75 on the Fifth Series.

W. J. Adams, Manchester. E. Q. Anwalt, Philadelphia.

E. O. Bailey, Bloomington, Ill. James Banks, McIntown, Pa. H. J. Barber, Alton, Ontario, Canada.

Edward F. Deen, Lancaster, Pa. John W. Brewer, Lake Preston, S. D. W. E. Bruce, Boston, Mass.

T. M. Broadus, Gordonville, Va. William Brown, New York City. T. H. Brennenman, Harrisburg, Pa.

Roscoe Brown, Oxford, Pa. Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Chas. L. Chapple, Minneapolis, Minn.

W. S. Collin, Mitchell, S. Dak. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. F. H. DeCamp, Mount Morris, N. Y. F. J. Derrberg, Centerville, Tenn.

William E. Gokay, Bennington, Vermont. M. A. Goltz, Winona, Minn. Henry E. Garthofner, Booneville, Mo.

Frank Hartmann, Middletown, Conn. F. L. Harwood, Warren, Mass. Walter Heggen, Rhinebeck, N. Y. Seymour Hull, Hoonick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. E. Sharon, Pa.

J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. Jno. Lohmann, Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.

H. G. Lavalley, Gouverneur, N. Y. C. J. McCloskey, Jersey City, N. J. John F. Mott, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, Ex Bradey, John R. Murray, Centerville, Tenn. Arthur Morin, Houghton, Mich.

W. B. Nethery, Toronto Junction, Ont. Edward L. Page, Lancaster, Pa. P. H. Peter Henderson, Mich. J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S. M. E. Read, Waseon, Ohio.

Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T. Albany. W. E. Sniwel, Parsons, Pa. W. A. Sidel, Snow Shoe, Pa.

Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.

W. H. Van Sirander, Winsted, Conn. Bertie Ward, Orange, N. J. Miss Emma A. Wiggins, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

## Questions; Eighth Series.

### MATERIA MEDICA.

References: Maisch's Materia Medica, U. S. Dispensatory, National Dispensatory, U. S. Pharmacopoeia, and Oelberg's Home Study of Pharmacy.

91 Give the names, habitat and part used of the drugs of the natural order Labiatae, which are official in the U. S. Pharmacopoeia, 1890.

Give the botanical name, habitat and medicinal properties of the following drugs:

92 Virginia snake root.

93 Seneca snake root.

94 Black snake root.

95 Button or corn snake root.

96 Canada snake root.

97 Checkerberry.

98 Yellow jasmnine.

99 Marshmallow.

100 Pareira Brava.

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record.*

### LIVE ADVERTISING.

To the enterprising and ingenious advertiser there are many schemes which present themselves outside of the regular lines of systematic advertising, and some of these have been known to yield most satisfactory results. Many of our readers have testified their appreciation of the value which the "Tips on Advertising" and its successor in our columns, the department headed "Business," have been to them by sending us specimens of their advertising schemes, and from these specimens much of the material for this article is drawn.

Among the most successful schemes are those which are the invention of the moment and which grasp some passing incident and turn it to a useful end. Such an inspiration, if we may so dignify it, was ingeniously elaborated by a firm of dealers in haberdashery in this city some time since.

#### LIVE ADVERTISING.

The head of the house noticed some of the cash boys worrying a stray cat which had taken refuge in the store and he very humanly ordered them to stop. He then had the cat put in an empty packing case which had some straw in it, and a piece of paper was put over the front of the box. Kitty wearying of the isolation thrust her head through the paper and thus sat contentedly observing the passers by, who in turn observed the unusual spectacle presented by the cat with much interest.

Seeing the opportunity presented the lettering shown in the accompanying illustration was hastily inscribed on the paper side of the packing case and the result was that the sidewalk soon became almost impassable from the congregation of people watching the cat.

The observation of Budge in "Helen's Babies" "I want ter see er wheels go woun" finds a responsive echo in the breast of children of a larger growth. Motion is more attractive than repose and animate more attractive than inanimate objects.

Evans, the Chestnut street, Philadelphia, cutter does not depend on his cutting alone to draw custom. His window displays occasionally evidence great originality and taste. Among the most striking of his displays was that of his Florentine orris sachet made some years ago. The window was draped with pale lilac and in the center was seated a beautiful girl about twelve years of age artistically clothed in some delicate lilac fabric and crowned with a wreath of violets. In front of her was a low table on which were a set of handsome silver and glass scales and a heap of the lilac tinted sachet powder.

From this heap she weighed out the required amount and put it into the highly ornamental envelopes in which it was sold.

As these were filled they were thrown carelessly on the floor of the window where a heap of them was already piled

up. A few not too conspicuous signs in the window announced the name and price of the powder.

The crowds attracted were so dense that the police eventually asked Mr. Evans to take the little girl out of the window, and we believe there was some talk of legal interference, enough at least to get the matter into the newspapers which was, of course, the best sort of advertisement.

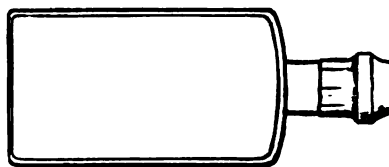
The rather commonplace sight of a young woman operating a typewriter is sufficient to attract a crowd before a Broadway window. The manufacturers of a lubricant have on their signs the words "Perpetual Motion" and by a system of clockwork and springs have two miniature cans of their preparation bobbing up and down. This display, if it may be dignified by such a term, seems to have proven a very profitable one. Precisely



the best line in which the druggist can carry out his "live" advertising must be determined largely by his own fertility and by the size and shape of the windows at his disposition.

It is questionable whether such humorous devices as illustrated here would not be considered as rather undignified for pharmacists to indulge in. There are some forms of such advertising, however, which the pharmacist might apply with advantage without any sacrifice of dignity on his part. One of the most attractive windows that we have ever seen in a drug store was one which was used as a kind of show laboratory. In it were arranged a glass Liebig condenser connected with a glass retort and receiver, the whole being in operation and being surrounded by several flasks, burettes, pipettes, beakers, etc.

### THIS BOTTLE CONTAINS



The article and our name are printed on the label. Do you see them? You can if you look at them right. Send us the name and we will mail you a Cook Book FREE on receipt of two cent stamp.

ers, etc. On another occasion this window contained two or three percolators in operation, the crude drug being shown on one side and the finished product on the other of each percolator.

While not exactly in the line of "live advertising" in the sense here indicated, we noted not long since in the window of Miner's pharmacy on Third avenue, New York, an interesting display consisting of a sheaf of rye standing behind a pile of rock candy, while in the center of the pile of candy appeared an open package of whole cherry bark. This display was surrounded by bottles of the finished and labeled product of Cherry, Rock and Rye.

### Color Harmony in Window Dressing.

The Norwich Nickel and Brass Works, Norwich, Conn., with salesrooms at 143 Eighth street, New York city, issue a "Columbian Edition" of their catalogue of display fixtures, a handsome book of some 106 pages. It contains a number of illustrations of druggists' display fixtures, such as shelf stands, glass shelf arrangements and brackets for show globes. The value of the catalogue is enhanced by an interesting and useful article on window dressing. The following general rules on color effects in window dressing, which we take from the appendix will convey an idea as to the character of its contents:

Red and violet do not accord well.  
Orange and yellow accord incomparably better than red and orange.

Orange and green do not accord well.  
Orange and violet accord passably.  
Yellow and green form an agreeable combination.  
Greenish yellow and violet blend nicely.

The arrangement of yellow and blue is more agreeable than that of yellow and green, but it is less lively.

Green and blue produce an indifferent effect, but better when the colors are deep.

Green and violet, especially when light, form a combination preferable to green and blue.

Orange-yellow, when placed by the side of indigo, increases its intensity and vice versa.

Red and green intensify each other.  
Yellow and indigo combine perfectly.

Red and orange do not accord well.  
Red and yellow accord pretty well, especially if the red is purple red, rather than scarlet, and the yellow rather greenish than orange.

Red and blue accord passably, especially if the red incline rather to scarlet than crimson.

Blue and violet accord badly.

When two colors accord badly together, it is always advantageous to separate them by white.

Black never produces a bad effect when it is associated with two luminous colors.

Black and white sensibly modify bright colors.

While gray never exactly produces a bad effect in its association with two luminous colors, yet in most cases its assortments are dull.

Blue, when placed by the side of orange, increases the latter's intensity, and vice versa.

## Correspondence.

### The Interstate League and the "Vaseline" Question.

**Editor AMERICAN DRUGGIST:** As you well know, at the meeting of the New York branch of the Interstate Retail Drug League, the question of the action of the Chesebrough Manufacturing Co. in endeavoring to protect their interests in their product from petroleum called "vaseline" came up for argument and was settled summarily. Before going further into the subject I would like to say here that if the members of our branch that do not attend our meetings knew how faithful those that do attend are to the interests of the pharmacists of this city they would not fail to add dignity to our meetings by their presence, and those that are not yet members, and are not dyed in the wool-cutters, find it to their interest to join us



at once and aid us in our war against the egotist, who have no scruple to ruin the many for an indefensible advantage to themselves. Sound the call of the brave, Mr. Editor, and let all those that are not entirely morally degraded join their brothers. They are needed; many minds revolving an important subject are more likely to come to a just and logical conclusion than a few, and diversity of opinion acts as a wise check on the impulsiveness of the sanguine and leads to accomplishing results more eminently beneficial. Moreover, as resolutions adopted by the few involve the whole of the members, it is but just to both that the transactions of our branch of the League should be cognizant to the majority.

Now for the "vaseline" matter.

The resolution adopted at the last meeting of the New York branch of the Interstate Drug League must be regarded as the logical outcome of the inquietude and distrust produced among the druggists of this city by the late action of the Chesebrough Manufacturing Company in behalf of their protected preparation of petroleum jelly. At one of the former meetings of the New York branch of the League an effort was made to have the action of the Chesebrough Company in behalf of their interests indorsed by this association, but eventually the resolution was laid on the table, and remains there still, though again brought up at the last meeting.

This proposed indorsement of the Chesebrough Company's action (though apparently unnecessary, as it is tacitly recognized by all fair minded men that it is always praiseworthy to protect one's interest) might not perhaps have met with opposition had it appeared as innocent, but the members of the New York branch of the League not forgetting that their interests were not wedded to those of the Chesebrough Company, and having in their mind a number of druggists of this city who had paid to this company sums of money in settlement of claims for alleged infringement of the merits of which claims the members of the New York branch of the League had no knowledge, and, moreover, as if that were not enough that these alleged disrespecters of a trade mark had been made to sign an agreement not to sin again, declined to place themselves on record as servilely indorsing, right or wrong, the pretensions of the Chesebrough Company.

Another factor influencing this conclusion was the reading by a member of a letter from the attorney of this company summoning the member to the attorney's office to answer a charge of infringement alleged against him. The member avers that he has been guilty of no wrong, unless selling or offering to sell, to two of the representatives of the Chesebrough Co. petrolatum as petrolatum, and labeled as such, be one. We had no reason to doubt the statement of this member.

I think that it will be conceded that it is not within the province of an association like the New York branch of the Inter-

state Retail Druggists' League to exercise mentorship over its members; neither is it within that province, nor suited to the interests of the association to aid in promoting monopolies or attempted monopolization.

I believe also that it is the sentiment of its members that infractions of laws, State or federal, should be punished by the operation of law without their becoming partisans for either side; also, where no real infraction has occurred, to disdain propping a rickety cause.

The Chesebrough Co may perhaps not deserve entirely the sentiment of dissatisfaction steadily growing against it, but it cannot be denied that that sentiment will hold it at least morally responsible for all unfair and discourteous acts done in its behalf by its agents, whether through over-zealousness, or through innate dictatorial imperiousness.

The writer remembers an exceedingly heated altercation he had some years ago

the mouthpiece of the company he represented.

The attorney of the Chesebrough Company lately, at one of our meetings, defined clearly enough and fairly enough the rights and relation of both sides in the vaseline matter, but, though his efforts were laudable, the feeling of discontent had become chronic and would not down, and, naturally, found expression at the meeting following.

As I understand trademarks, what constitutes an infringement on one depends upon the character of that trademark—whether it protects only a name or both name and a label. Of course the liability incurred when the whole or a material part of a label has been counterfeited admits of no argument. If but a name has been registered, there is no reason to infringe; where a label, the spirit of equity governing decisions in copyright cases would most likely apply and find no infringement between original creations, legitimately devised, but coincidentally possessing points of resemblance.

As to rights at common law, and the Chesebrough Company seems to resent bitterly the furnishing petrolatum when small quantities of vaseline are called for, it would remain to be proved whether vaseline has one or more than one standard, and whether the better quality of petrolatum is not identical with some one of these standards; if coming from the same source (petroleum ooze), who shall say that the terms vaseline and petrolatum are not synonyms? Salt obtained from sea water is salt, and if some manufacturer obtaining it from the same source and by a similar process, should take it into his head to christen it "Neptuline," and register that name as a trademark, would it still not be salt? And would not the sea salt of the other manufacturers also be neptuline?

The name vaseline appears to me (in its mixed etymology) to have been compounded of *vas* (the French for ooze) and the much abused terminal *ine* preceded by an *a* for the sake of euphony. In pure English it would be "oozine."

A. M. RONTHEY.

New York, May 5, 1894.

## — HENRY C. BLAIR'S PREPARATIONS —

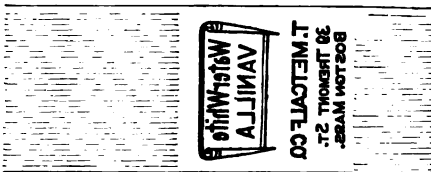
<b>PREPARED WHEAT FOOD.</b> The best for Infants and Invalids. An extract of choice Wheat containing all the nutritious properties in a concentrated and easily digestible form. <b>35c. 1 Lb. CAN.</b>	<b>DIGESTIVE TABLETS.</b> Cure Dyspepsia, Heartburn, Indigestion, etc., etc. <b>25c. PER BOX.</b>	<b>LIQUID RENNET.</b> For making, in a few minutes, Delicious Dessert. Convenient, Economical, Wholesome. <b>20c. PER BOTTLE.</b>
<b>ALMOND MEAL.</b> Cleanses, Softens and Whitens the Skin (To be used in place of Soap) <b>25c. PER CAN.</b>	<b>DENTOCRETE.</b> (TOOTH POWDER.) Perfectly Harmless, Cleanses the Teeth and Sweetens the Breath. <b>50c. PER BOTTLE.</b>	<b>QUININE and GLYCERIN HAIR TONIC.</b> (Original with us.) Promotes the growth and is a superior dressing. <b>\$1.00 PER BOTTLE.</b>
<b>ALMOND CREAM.</b> Healing and soothing. Prevents chapping and Sunburn. <b>50c. PER BOTTLE.</b>	<b>CATARRHAL CREAM.</b> Cures Cold in the Head, Hay Fever, Catarrh. <b>50c. PER BOTTLE.</b>	<b>YERBA C-OCOLATES</b> 1 gr. Quinine in each. <b>TONIC CHOCOLATE DROPS.</b> 1 gr. Iron each. <b>WORM CHOCOLATES</b>
<b>SLIPPERY ELM TABLETS.</b> A Demulcent for Throat. Cures Irritation and Cough. <b>25c. PER BOX.</b>	<b>HEADACHE TABLETS.</b> Caffeine Composition. A prompt and convenient remedy. <b>25c. PER BOX.</b>	<b>RHUS TABLETS.</b> An astringent lozenge for sore throat. <b>25c. PER BOX.</b>
<b>WALNUT &amp; EIGHTH STS. Established 1849. PHILADELPHIA.</b>		

SPECIMEN OF PHILADELPHIA CIRCULAR.

with one of these agents, but is charitable enough to believe that the agent was not

### A Clever Idea.

John A. Schleicher of the S. R. Niles advertising agency has worked out the



unique and clever idea utilized by Theo. Metcalf & Co. in advertising their water-white vanilla which we reproduce herewith. Hold up to the light.

### Interstate League.

The New York County Branch of the Interstate Retail Druggists' League met in the Mott Memorial Hall, 64 Madison avenue, Friday, May 4, at 8.30 p.m. In the absence of President Osmun the chair was taken by A. M. Rontey. Reports were received from several committees. The committee appointed to confer with the German Apothecaries' Society on the question of indorsing or condemning the action of the Chesebrough Manufacturing Company in proceeding against druggists on the alleged charge of bottling and selling petrolatum as "vaseline," reported through Mr. Erb. The committee stated that the German Apothecaries' Society had agreed to instruct its members not to dispense petrolatum when "vaseline" is called for.

Mr. Weinman was anxious to have the Interstate League take similar action, but a majority of the members objected. Mr. Rontey seemed to voice the sentiments of the majority of these members in attendance when he said "It is not the place of the League to catechise its members." T. J. Barnaby thought it would be proper for the League to send an official notification to all members pointing out the fact that it is illegal to use the word "vaseline" on any petrolatum not manufactured by the Chesebrough Mfg. Company. He related his experiences with the vaseline people, and intimated that the agents of the company had tried to entrap him into selling petrolatum for vaseline by their method of asking for the article. He objected to the Chesebrough Mfg. Co.'s treatment of the retail trade and had now decided to keep no more vaseline, but to use hereafter the petrolatum of the U. S. Pharmacopoeia. A spirited discussion ensued in which every member took part. The action of the Chesebrough Company in engaging men to spy upon the members was disapproved of. Some were in favor of taking a determined stand against the use or sale of any proprietary article which is to be found in the U. S. Pharmacopoeia under a legitimate title. It was ultimately resolved to take no action in the matter of indorsing the Chesebrough Company's campaign against members; but instead the following resolution, introduced by M. F. Bender, treasurer, was unanimously adopted. The resolution reads:

"Inasmuch as the New York County Branch of the Interstate Retail Druggists' League does not admit that any of its members have substituted Petrolatum for 'Vaseline,' it is moved as the sense of this branch that further discussion regarding the advisability of indorsing the action of the Chesebrough Company in their attempts to protect their copyright, be abandoned; and as a rider to this motion, it is further resolved that the New York County Branch request the National body to communicate with the different State pharmaceutical associations and the American Pharmaceutical Association advising that petrolatum responding to the tests of purity of the United States Pharmacopoeia be officially considered equal in all respects to the proprietary substance named 'vaseline,' and that the physicians and the pharmacists of the country be so notified through the journals published in their interests."

The resolution was favorably commented upon by all present and seemed to afford general satisfaction. This disposed of, routine business was taken up. Oscar Kress reported that the Nixon bill providing for a reduction in the excise license fee had passed the Assembly in a modified form. The tax had been increased in committee and was now placed at \$100.

The membership list was increased at this meeting, and before adjournment it was resolved on motion of Mr. Bender to urge every member to aid in the collection of dues, and as an incentive to pay to every member making collections the same percentage as that allowed to the hired collector, viz., 25 per cent. of the amount collected.

The next meeting will be held in the Mott Memorial Hall, 64 Madison avenue, on Friday, May 18, at 8 P. M., and as a nominating committee for the nomination of officers to serve during the ensuing year will be appointed the officers look for a large attendance.

Colonel Robert A. Chesebrough was seen in his office in the Chesebrough Building on State street. When handed a copy of the resolutions adopted by the New York Branch he scanned it carefully and was visibly affected. "This is what I might have expected," he said; "for twenty years I have worked to perfect 'Vaseline' so that physicians might be placed in possession of a medicinal ointment base of undoubted purity; but the druggists of the country seem to have consistently opposed and interfered with my efforts." "It only needed this," he exclaimed bitterly, "to give me a foretaste of the treatment I may expect to receive from druggists." He slapped the paper viciously with the back of his hand and threw it angrily from him. "The whole trouble," he said, "dates back to the appearance in the Pharmacopoeia of a formula purporting to produce vaseline. Here Col. Chesebrough produced a copy of the 1880 edition of the Pharmacopoeia, and read the article Petrolatum. I reminded him that he was reading from an old edition of the Pharmacopoeia and that the description of the general appearance of a petroleum jelly was not a formula. He would not listen to this, but proceeded to defend his actions in compromising suits. He told of numerous cases where he had paid all of the legal expenses connected with the commencement of suits, and indignantly repelled the charge having used undue severity in prosecuting offenders."

#### Liquor Licenses in Massachusetts.

The pros and cons of the sixth-class license question have received considerable attention at the hands of the people and officials of the cities and towns of Massachusetts during the last few weeks. The discussion has, perhaps, been onesided, for the druggists have in most instances maintained a dignified silence and have refrained from airing their grievances or opinions in the press. The action of the officials in different localities has been varied. In one town the vote was for license, but the powers that be refused to grant any licenses to druggists. In some of the "no" districts only one druggist was licensed, while in others the number of licenses issued kept pace with the whims and dislikes of the licensing boards. In other "no" towns no permits have been issued to druggists. Some of the refusals have no doubt been justified upon the ground of improper use of previous permits, while others have been without foundation. The policy of refusing to license druggists to sell liquor for medicinal purposes in a no-license locality may promote the cause of temperance, and it may not.

It seems out of the question, however, to attempt to regulate the morals of a community by such a senseless proceeding. Here is a brief summary of the action taken by city and town authorities upon this question: In Boston all of the druggists have been licensed with the exception of the few who have been convicted of violations. William Hurley and Harry Wardle, both of Dedham Centre, have been licensed. Two of the seven applicants of South Framingham were licensed. Frederic B. Horne of Framingham and Frank W. Goodwin of Saxonville were the successful applicants.

Fitchburg's aldermen gave a hearing upon this question. A petition was presented remonstrating against granting more than three druggists' licenses, and

several Prohibitionists took the same ground; there was only one person present to speak favorably for the druggists. The aldermen took no action at this meeting, but later voted to grant no licenses.

Arthur W. Whitcher, 15 Pleasant street; F. P. Brooks, 361 Main street; Samuel Highley, 394 Main street; Gordon Parker, 417 Main street; John J. Mohern, 468 Main street; Elmer F. Blank, 889 Main street, all of Woburn, have received licenses.

Lynn's aldermen have refused to license any druggists this year.

One of Waltham's druggists, C. F. Page, was not licensed, but permits were given to D. D. Frothingham, T. F. Kelley, J. J. Kingsley, G. L. Hoyt, H. I. Johnson, H. E. Flemming, E. E. Butman, E. E. Jennison, E. J. Williams.

The town of Maynard voted "yes," but the selectmen refused to act in accordance with this vote as far as druggists were concerned. E. S. Crowley of Medford was licensed. Somerville druggists who are applicants will be compelled to wait a fortnight for the decision of the aldermen. This is the second continuance.

Newton has been in a ferment over this subject, and at the hearings which were given some severe strictures were indulged in as to the method in which certain stores in that city conducted this portion of their business. Twenty licenses were finally granted and three refused.—The selectmen of Hyde Park have issued sixth class licenses to druggists on the condition that the licensees record every sale, and submit their lists once a month to the chief of police. It is understood that any violation of the law will cause a license to be revoked at once.

Fifty-six Lowell druggists applied for licenses and most of them were successful. A movement is on foot in Attleboro to have only one license granted. One of the selectmen of Marblehead thought that one drug store should be allowed to sell for medicinal purposes, but this proposition was defeated. On May 1 it was said that the druggists of this town had no liquor on hand not even for a physician's prescription. Ten of Chelsea's druggists have filed applications, but as no licenses have been granted during the first three years it is thought that there will be no new departure at the present time. Cambridge druggists to the number of twenty-five have received permits. Two or three licenses were held back for the purpose of "getting more facts." The eight Everett petitions were refused by a vote of 4 to 2.

At the license hearing in Malden it was stated that 23 druggists petitioned for sixth class licenses. A. B. Morgan, druggist, was the first petitioner. He thought that licenses were necessary in his business, and that it was encouraging hypocrisy not to grant them.

C. A. Charles, druggist, presented a petition signed by all the physicians in the city. He believed that Malden had reputable druggists, and that all they asked was for licenses, and that the law regulating them should be strictly enforced. The remonstrants made the store of Everett C. Dodge a special point of attack, it being claimed that his store was a nuisance, and that often prescriptions could not be filled as the necessary drugs were not in stock. The question is still under consideration in this city, and since the first of this month a number of the druggists met and appointed a committee to wait on the mayor. They asked him if they could sell liquor, as in former years, pending action on their applications. The mayor promptly replied in the negative.

The committee reported the result of the interview, and the druggists voted to clean out all the liquor in their stores and furnish none even to a dying man.

Brookline's selectmen are considering the advisability of granting licenses, which they will in all probability do to the six applicants. In Lawrence all of the druggists who applied were given permission to sell.

The license commissioners of Worcester gave 40 permits to the following druggists: Albert W. Andrews, 207 Front street; Walter F. Armitage 185 Cambridge street; John F. Brusco, 78 Leicester street; William A. Brown, 62 Grafton street; David L. Bradt and William S. Flint, 41 Park street; T. A. Brennan, 41 Millbury street; E. A. Brewster, 56 Front street; E. D. Buffington, 802 Main street; William E. Banfield, 190 Pleasant street; Edward J. Churchill, 58 Green street; William L. Davis, 602 Main street; A. L. Denechaud, 227 Front street; Walter S. Doane, 284 Pleasant street; William E. Doran, 50 Trumbull street; Edward J. Fitzgibbon, 18 Vernon street; George E. Fairbanks, 10 Front street; Charles J. Foley, 490 Southbridge street; Joseph McHale Foy, 48 Lamartine street; Joseph E. Gieroux, 72 Southgate street; G. J. Green, 974 Main street; J. F. Guerin, 236 Front street; F. M. Harris, 814 Main street; Francis McHugh, 26 Waverly street; Godfrey K. Mellor, 480 and 482 Main street; Edwin A. Mellish, 905 Main street; Peter D. Moriarity, 125 Park street; Warren M. Maynard, 876 Main street; Frederick N. Oxley, 648 Main street; Edmond J. Power, 98 Green street; Charles L. Runalett, Jr., 570 Main street; Scandinavian Co operative Drug Company, 744 Mullberry street and 254 Main street; George T. Scott, 569 Main and 1 Southbridge street; C. C. Stewart, 8 Millbury street; William E. Turple, 46 Pleasant street; William A. Volkmar, 3 Pleasant street; John J. Whittier, 49 Main street; William H. Willard, 183 Chandler street; Duane B. Williams, 16 Lincoln Square; Arthur C. Woodward, 838 Main street.

### New York City.

L. J. Meighan, class of '93, N. Y. C. P., has purchased the business of A. L. Goldwater at 615 Courtland avenue.

L'Estrange & Hatch's store of Ruthersford, N. J., has been improved by a set of C. H. Bangs' fixtures of Boston, Mass.

Herman I. Thomsen of J. J. Thomsen's Sons, Baltimore, Md., was noticed in the city this week.

George J. Seabury is spending a few days at Hot Springs, Va. From there he will proceed to Richmond, where he will be the guest of Major Gunther.

Ashton M. Boney of this city has opened the store under Abbey's Theater. The store has an elegant set of C. H. Bangs' drug store fixtures.

Percy C. Magnus, formerly American representative of the Crown Perfumery Co., London and New York, is now manager of the perfumery department of David S. Brown.

W. Foster Rowe, who for so many years has been representing Whittall, Tatum & Co. of this city, was seen on Broadway a few days ago arm in arm with one of his customers. Mr. Rowe has recently returned from a most successful trip throughout New York State.

J. J. McLaughlin, well known in Toronto as a manufacturing chemist and

maker of mineral, medicinal and table waters, is spending a few days in New York City, which he has reached on his return from an extended Southern trip taken for his health's sake.

### New York State.

Mr. Goodenow has recently opened his drug store in Naples.

Hunt & Chatman of Marathon have opened a drug store in Binghamton.

There is talk of Dr. James Tonhey opening a drug store in the Kels store, Monterey.

The drug firm of Anderson & Wilcox of Oswego has been succeeded by the firm of Anderson & Colgan.

George E. Stillman, clerk at Townsend's drug store, Greenwich, has purchased a store at Troy.

It is rumored that a drug store will be opened at Baker's Falls in the store vacated by Collin & Congdon.

It is rumored that Melvin Bellinger will open a drug store in the Conover block, Cobleskill, in the place recently vacated by Vincent Florio.

Howgate's drug store is now located in the Wilcox building, Highland, and a prettier drug store it will be hard to find in this part of the country.

The drug store at the corner of Baldwin and Market streets, Elmira, conducted by John Bartholomew, was recently purchased by Paris C. Pettit of that city.

Michael Shaw, for a number of years with Druggist J. M. Steel, has become a partner with Benjamin C. Wickes in the conduct of the drug store at the corner of South and Genesee streets, Auburn.

Ingraham Brothers, the old reliable druggists of Elmira, are now settled in their new store, which is one of the most attractive on East Water street. The show windows quickly attract all passers.

Burglars tried to enter Sears & Forrest's drug store, Ogdensburg, night before last, but did not succeed. A broken window in a door showed where they had commenced operations.

F. L. Zimmerman, a Rochester pharmacist, has leased one of the stores in the new business block at the corner of South Liberty street and Central avenue, Batavia, and will open a drug store there.

The 16th annual meeting of the New York State Pharmaceutical Association will be held at Saratoga Springs, beginning June 26, and continuing the 27th and 28th. Further details will be announced later.

C. E. Williams, formerly of Carthage, now a leading druggist in Ogdensburg, has been elected secretary and treasurer of a newly organized association in St. Lawrence County, the primary object of which is the advancement of pharmaceutical interests and social intercourse.

Patchogue is to have another drug store in the near future. At present there are two in the village, both of which do an excellent business, the people from surrounding villages patronizing them nearly as much as the villagers. The new store will be in the Roe block on Ocean avenue.

The pharmacy of M. L. Trowbridge, Syracuse, N. Y., has passed into the hands of Bibbens & Jewel of the same city, Mr. Trowbridge having sold his interests in the store to the firm named. Mr. Trowbridge with his brother will take a pharmacy course at the University of Michigan.

### Massachusetts.

Henry Barrett has been repairing the interior of his drug store at Adams.

Charles A. Adams of Boston is the new druggist with A. M. Cheney & Co.

A set of Bangs' fixtures has been placed in the new store of R. J. Mills, Somerville.

W. H. Fogerty of New Britain, Conn., has purchased the drug store of Charles Leuth, Webster.

C. H. Bangs of Boston has placed his drug store fittings in the store recently opened by Whipple and Mansfield of Salem.

The Goodall Drug Company of Holyoke have refitted their drug store and placed in it a set of C. H. Bangs' fixtures.

W. R. Proctor of Sandwich, having recently moved his drug store, has had it refitted with C. H. Bangs' fixtures.

Gilbert Roy, lately employed with Simard & Co., druggists, Springfield, has gone to Canada to open a drug store there in company with his father.

The members of the Boston Druggists' Association dined at Young's Hotel on the evening of April 24. President Babcock was detained in New York, and his place at the head of the table was taken by ex-President Davidson. There was little business excepting the adoption of important amendments to the by-laws. An entertainment was furnished by Arthur I. Newhall of the North American Phonograph Co., who not only gave a practical illustration of "The Edison Phonograph," but tested its capabilities as an entertainer, which included a great variety of selections as originally rendered by Gilmore's Band, U. S. Marine Band, Reeves' Band, Alhambra Quartette, Walter Emerson, etc.

### Maine.

It is reported that Dr. Rice will open a drug store in Frankfort in a short time.

The drug store of M. C. Merrill of Yarmouth has been bought by F. W. Breckham, formerly with Mr. Foss, a druggist of Portland.

The interior of Dr. Fournier's drug store has undergone quite a change of late, having been remodeled and newly painted. It now presents an attractive appearance.

The drug store formerly occupied by the late H. L. Eldridge in Brewer will soon be opened by Fred T. Wyman, who is now having the store renovated.

The Chemical Association works at Rumford Falls are making plans to enlarge their works and to build permanent buildings this season. They are to build of brick and will probably begin operations the first of June.

### Richmond Notes.

Robt. Christian, formerly with Phil Slaughter, is now with the Owens & Minor Drug Co.

The Medical Board is in session here now. Seventy-two candidates have appeared. The papers are now in the hands of the examiners.

G. W. Latimer contributed \$100 recently to aid in lifting the debt on the Y. M. C. A. of this city. T. Roberts Baker gave \$50 for the same purpose.

The State Board of Dental Examiners met in the capital here to examine the eight candidates on the 10th inst. Five passed a satisfactory examination, and were granted certificates.

C. R. Link won the pharmacy prize of a gold medal for best class standing, offered by the faculty of that department in the University College of Medicine. The presentation speech was made by R. W. Powers of Powers-Taylor Drug Co.

The Medical College of Virginia closed its session on the 8d inst. The commencement being held at Richmond Theater. Twenty-five graduates were given diplomas. They and the Alumni association were banqueted at the Zimmerman Hotel.

The first annual commencement of the University College of Medicine took place at the Richmond Theater on the 5th inst., ten graduates receiving diplomas. After the exercises the graduating class was banqueted at the residence of Dr. Hunter McGuire.

The druggists as a rule in Richmond submit to the high tariff imposed by the Bell Telephone Co. without a murmur, fearing the result may be of a war for lower rates, but truly there is no reason why a tax of \$70 per annum should be demanded by the Telephone Company when in other towns not more than \$25 is asked.

### Michigan Mention.

Fire last week did \$100 worth of damage to the buildings of the Detroit Chemical Co.

E. J. Garner, prominent druggist at Port Huron, died April 17 of typhoid fever.

M. B. Patterson of Grunow & Patterson, Detroit, will shortly start for a trip to England.

Frank J. Brainerd, a popular young druggist at Eaton Rapids, was married last week to Miss Abbie Harris.

Frederick Klux was last week sentenced to two years' imprisonment for robbing C. K. Trombley's drug store, Detroit.

Brown's drug store, Detroit, was entered under the glare of the electric light and \$187 taken from the till. The front door was left unlocked.

The work of remodeling the first floor of the Hurd House for occupancy by Waldron & Todd's drug store, Jackson, has commenced. They expect to move about May 1.

A Union City druggist put up a quantity of morphine for a lady, but as she was leaving he heard her say she was going to end her life. The druggist ran after her and took the poison away. The firm was Burnett & Strahm.

Architects John Scott & Company, Detroit, have prepared plans for rebuilding the drug store of T. H. Hinchman & Sons, on the south side of Jefferson avenue, between Wayne and Cass streets. The estimated cost of the work is \$10,000, for which Henry Carew & Company have the contract.

### Chicago.

The warm sunshine of the last ten days has brought about quite a transformation among the retail drug stores and brightened the hopes of the trade generally. Doors have been opened, new displays of spring medicines and toilet articles arranged in the windows and soda fountains are being put in order for the

thirst that will attend warmer weather which is close at hand. On the whole there is a revival of interest which extends from the jobber to the apprentice in the retail store.

The business of the wholesaler has recently been transacted with a good deal of caution owing to the numerous small failures, and the line of credit is being more closely drawn than for some time. One of the favorable features mentioned is the advent of warm weather, which will shift demand to articles in which there is more profit. The general reduction that has been made in rents is also an item worthy of note, and many retailers who have been paying World's Fair prices for stores and houses will experience some relief.

W. C. Scupham, the druggist at the corner of State and Randolph streets, furnishes a most striking example of patience, and at the same time he enjoys the reputation of being one of the most accommodating men in Chicago. All day long there is a stream of people filing before the cashier's desk wanting stamps—nothing but stamps. The daily sales of stamps rival in number the amount sold at any stamp window in the post office and yet there is not the faintest suspicion of worry on the face of the proprietor. Every man, woman and child is accommodated with as much courtesy as if they were buying goods in which there was a profit. There is a reason for this although it is not suggested to detract anything from Mr. Scupham's generosity. About a year ago a number of downtown druggists adopted stamp vending machines, affairs that required the placing of a nickel in a slot and returned a cheap envelope. It was soon found that it displeased customers who had long been in the habit of purchasing what they needed without the investment of an extra cent for something they did not want. But Mr. Scupham continued to sell stamps as before. It may seem a small thing, but it turned many his way and they have been going ever since. Of course these people are often reminded while in the store that they need things by a display of the goods and they become customers whose purchases amount to considerable during the year.

### Southern Siftings.

E. Cantler of Madison avenue, Covington, Ky., has sold his drug store to Mr. Otte of Cincinnati.

E. A. Zeither has placed in his new store at Havre de Grace, Md., a set of Bangs' drug store fixtures.

C. O. Taylor of Big Spring, Ky., now a druggist of Louisville, and Miss W. W. Applegate of West Point, Ky., were married recently.

George Ebeling, the druggist, has another attraction in his drug store window on South Market street, Wheeling, W. Va., in the shape of four elegantly bred leghorn chickens.

Col. Ed. W. Fitch, the well-known druggist of the firm of Arthur Peter & Co., of Louisville, has severed his connection with that house and accepted an important and lucrative position with the chemical and pharmaceutical establishment of Parke, Davis & Co., Detroit. The colonel will still retain his residence in Jeffersonville, where he is quite a factor in society and church. His duties in his new departure will require his being a portion of the time at Detroit and the large cities of the middle West.

### Random Notes.

John L. Vine's new store, Norwood, Ohio, has been fitted up with Bangs' fixtures.

Brayley Sons & Co.'s laboratory at Montreal was damaged by fire on the 19th inst.

Anto Gonazales of Habana, Cuba, has in his store a set of C. H. Bangs' fixtures of Boston, Mass.

Matthew Stein, a well-to-do druggist of Mahanoy City, Pa., and Miss M. Ball were recently married.

Arthur J. Whiting of Nashua has purchased the drug business owned by J. H. Nutt at Raymond, N. H.

James Hanson has sold his drug store in the Keystone Block, Logansport, Ind., to B. S. Keesling and Homer Closson.

Harry C. Watt has greatly improved his store on Broad street, Philadelphia, by placing in it a set of Bangs' fixtures.

Bernard Billings, Newton Upper Falls, Mass., has refitted his store with a set of C. H. Bangs' fixtures of Boston, Mass.

The Low Art Tile Co., Boston, has recently furnished the store of H. J. Alfreds, Providence, with a new fountain.

D. R. Byard of Warren, Ohio, has moved his drug store to the room formerly occupied by P. M. Maloney's opera store.

George Shaw has purchased the drug business of William C. Sanborn on Main street, Manchester, N. H., and will continue to carry on the store.

F. W. Strater, Frank Eldridge and G. L. Thorp are the incorporators of the San Juan Drug Company of Durango, Cal. Capital stock \$50,000.

The P. J. Noyes Mfg. Chemical Works at Lancaster have been sold to Parke, Davis & Co. of Detroit, Mich., who will move the business to that city.

H. S. Cook of the H. S. Cook Pharmacy, Armourdale, Mo., has severed his connection with that firm and has assumed charge of the Gem Pharmacy.

A new drug store has been opened in Tecumseh, Neb., by the firm of Orr & Temple. Both gentlemen have an excellent business reputation in Tecumseh and success is assured.

H. O. Frank and Frederick Esaw were selected by the Milwaukee Druggists Association at a recent meeting to investigate and make a report upon the Universal Trade Association of Detroit.

Prof. Charles V. Riley, who has for many years been chief entomologist of the department of agriculture, has resigned. The resignation was requested by the secretary and will take effect June 1. The position pays \$2,500 per annum.

We learn that M. G. Planchon, the popular director of the Paris School of Pharmacy, has been elected a member of the Superior Council of Public Instruction, in the place of M. Diacon, the deceased director of the Montpelier School of Pharmacy.

M. Sarbach & Co., who lately purchased the drug store of Geo. W. Simonds, at the corner of Fourth and Commercial streets, Atkinson, Kansas, are now in charge, and actively engaged in refitting and restocking. They will have in a little while one of the most complete establishments in this part of the West.



## Boards and Associations.

**KINGS COUNTY PHARMACEUTICAL SOCIETY.**—At the annual meeting which was held on Tuesday, May 8, the following officers were elected for the society for the ensuing year: President, L. C. Perkins; vice presidents, F. J. Pamphillon, Wm. Muir and W. J. Hackett; secretary, F. W. Bliss; treasurer, P. W. Ray; trustees to serve three years, L. F. Stevens, W. B. Avere and A. H. Brundage.

**IOWA BOARD OF PHARMACY.**—The board has examined fourteen applicants for certificates to practice pharmacy since April 11 and all but one have passed with an average standing of 82 per cent. Those who passed are: Thos. B. Platt, Montezuma; William A. McKeehan, Fort Madison; G. W. Shreve, Bevington; E. K. McElroy, Clare; Ralph W. Emerson, Cedar Rapids; O. K. Dick, Des Moines; Ella C. Cole, Renwick; Edward S. Holt, Animosa; Harvey E. Beam, Animosa; H. G. Steva, Earlville; Emmett A. Powers, Moulton; John H. Luers, Sheldon; Edward Larson, Alta.

**STATE BOARD OF PHARMACY, ILLINOIS.**—The State Board of Pharmacy, Illinois, examined a class of 103 at their meeting in Chicago, April 10-13, 1894. The following passed as registered pharmacists:

W. C. Ballowitz, W. B. Behrens, T. F. Cannon, R. S. Christman, C. E. Cress, J. F. Fiske, K. R. Forster, S. G. Frank, P. Fuller, J. C. E. Hagen, B. K. Bollister, P. Johannes, Jr., F. W. Keuper, W. M. Nachtway, H. A. Nielson, H. J. Schulte, A. D. Thorburn, E. J. Weeks, H. H. Weissborn, O. Wintermeyer, G. F. Yates, H. J. Zapp of Chicago; E. E. Horrall, Olney; C. R. Jackson, Gibson City; C. L. Krause, Peotone; C. V. Hyman, Batavia, and W. H. Schmiedeskamp, South Evanston.

The next regular meeting of the Board will be held at 173 39th street, Chicago, June 12, 1894.

**WASHINGTON BOARD OF PHARMACY.**—The next quarterly meeting of the Washington State Board of Pharmacy for the examination of applicants for registration will be held at the Arlington Hotel, Seattle, May 14 and 15, 1894. Those desiring to take this examination should forward their application to the secretary before the date of meeting.

**NORTH CAROLINA BOARD OF PHARMACY.**—At the April meeting of the North Carolina Board of Pharmacy, held in Raleigh, on April 11 and 12, the following applicants passed successful examinations, viz.: W. Hoyle Gardner, Shelby; Howard Gardner, Winston; M. H. Aycock, Louisville; H. W. Brodoux, Asheville; R. C. McNorton, Wilmington; Jesse L. F. Alston, Louisburg; Jno. L. Eagles, Wilmington; James E. Shepard, Charlotte; Chas. F. Crews, Winston; Harmon H. Perry, Wake Forest.

A. W. Rowland, a member of the board, tendered his resignation on account of declining health. O. M. Reyster of Hickory was unanimously elected to fill the vacancy thus occasioned.

The next meeting of the board will be held in Asheville a few days prior to the meeting of the A. P. A., due notice of which will be given by the secretary Wm. Simpson, Raleigh.

**THE MISSISSIPPI BOARD** met in regular session at Jackson, April 8. The secretary being absent, J. B. Small was appointed secretary *pro tem*. The following persons were granted licenses upon passing satisfactory examinations: W. A. Adams, Natchez; L. J. Mertz, Hansbro; E. G.

Spinks, Meridian; S. S. Winston (colored), Natchez; A. D. Semington (colored), Meridian; A. L. Booth, Burnsville.

**NEW YORK CITY BOARD.**—At the April examination the following candidates were successful: Frederick M. Bailey, Oscar J. Ruzicka, R. R. Reed, G. S. Tomlinson. During the month 36 pharmacists were registered.

**MINNESOTA STATE PHARMACEUTICAL ASSOCIATION.**—The annual meeting of this association will occur June 12 and 13, 1894, at Lake Minnetonka, Hotel St. Louis.

**OHIO ASSOCIATION.**—The date of meeting of this association has been changed from May 22 to June 5, 6, 7. The following is the programme for the three days:

Tuesday, June 5. { Session 9.30 to 11.45 A.M.  
Session 2 to 5 P.M.  
8 P.M. Reception at Grand Hotel.  
Wednesday, June 6. { Session 9 to 12 A.M.  
Session 2.30 to 5 P.M.  
Evening concert not yet decided where.  
Thursday, June 7. { Session 9 to 11.30 A.M. Adjourn.  
1 P.M. take boat for Coney Island and banquet.

The headquarters of the association will be at the Grand Hotel, Cincinnati. Albert Wetterstrom is local secretary.

**THE KANSAS CITY PHARMACEUTICAL ASSOCIATION** held its regular monthly meeting Thursday, April 12, at The Elms Hotel, Excelsior Springs. Many subjects of local interest to the druggists of the city were discussed, and considerable new legislation was enacted. Preliminary arrangements for the meeting of the State association there in June were put in the hands of appropriate committees, and a large and interesting meeting is expected. Among those present were: President W. E. King Secretary Paul L. Hess, Dr. W. C. Boteler, wife and son, H. C. Arnold and wife, J. Griffith, George Hardesty, S. H. Howard, W. M. Federman, H. G. Riddle, George Berry, Mr. Lawson, A. Bruemert, A. L. Sihler, H. P. Laird, George Clinton, Dr. C. E. Cochrane and wife, William Mittebach and wife and Miss Cochrane.

**CALIFORNIA BOARD OF PHARMACY.**—The regular quarterly meeting was held April 11, 12 and 13, when the following named were registered as graduates in pharmacy: W. B. Whitney, Philip P. Moeszinger, W. C. Hassler, Paul A. Derge, E. E. Evans, J. E. Miller, J. R. Carick. The following named passed licentiate examination: H. J. Wolf, F. W. Carlisle, C. H. Lewis, C. K. McDonald, B. E. Gey. The following named passed assistant examination: A. D. Hill, J. H. Poague, C. L. Caven, S. Sollenberger, H. C. Cox, G. L. Edelman, J. B. Campbell, W. J. McNeil.

Registration was due May 5, 1894, delinquent July 5. The fee for registered pharmacist is \$2, registered assistant pharmacist \$1. The board of pharmacy having had the matter of selling pharmaceutical preparations by department stores brought to their attention have taken the necessary steps to prohibit such sales.

**QUEBEC PHARMACEUTICAL EXAMINATIONS.**—The quarterly preliminary examination of the Pharmaceutical Association of Quebec was held on Thursday last in Montreal and Quebec when thirty-five candidates presented themselves in Montreal and five in Quebec; of these the following named in order of merit passed, and are entitled to be registered as certified apprentices, namely: Gaston St. Jacques, A. Quentin, A. Desormeau, J. B. T. Biron, M. Charbonneau, Allan Ayerst, and Wilfred Landry.

These examinations are held on the first Thursday of January, April, July and October and candidates are required to file their applications with the Registrar at least 10 days before the date of the examination. The subjects examined upon are English, French, Arithmetic, Latin, Geography and History. The examiners are Prof. A. Leblond du Brumath and Prof. I. Gammell. The examinations for major and minor candidates will be held in Montreal on Tuesday, April 17, at 9 A.M. and continue from day to day until completed.

**QUEBEC PHARMACEUTICAL EXAMINATION.**—The semi-annual examination of the Pharmaceutical Association of the Province of Quebec was held in the Montreal College of Pharmacy, 595 Lagachetier street, commencing on Tuesday, April 17, and closing on Thursday night. Twenty-one candidates for the major and twenty-three for the minor examination presented themselves, and of these, the candidates who are named in order of merit passed, and are entitled to be placed on the register of the association, as "Licentiates of Pharmacy" and certified clerks respectively, as follows: P. J. A. Olderic Brault, R. A. Taschereau, J. A. Peltier, Henri Laurent, William Lyman, J. A. Picotte, Wilfred L. Taylor, J. E. A. Gauvin, Xiste Bourgne, as "Licentiates of Pharmacy," and James H. Goulden, R. G. Rioux, J. C. A. Bates and T. E. Huot (equal), Alex. Lemieux, Osborne Thos. Pinch as "certified clerks." The candidates were submitted to a severe written and oral examination, in chemistry, materia medica, botany, practical dispensing, weights and measures and reading of prescriptions.

The examiners were, S. Lachance, W. H. Chapman, J. R. Parkin, Montreal; A. E. Duberger, Waterloo; and R. W. Williams, Three Rivers.

**KENTUCKY PHARMACEUTICAL ASSOCIATION.**—The seventeenth annual meeting of the Kentucky Pharmaceutical Association will convene in the court house at Paris, Wednesday morning, May 16, at 10 o'clock.

J. W. Gale of Frankfort, secretary of the association, has sent out the following circular:

It is earnestly urged that every druggist in the State, and especially members of the association, make a reasonable sacrifice to attend this meeting, promising, as it does, to be of unusual importance from business, social and professional standpoint.

The far-famed hospitality of the beautiful Capital of the "Blue Grass" should, of itself, be a sufficient inducement to attract a large attendance; four sessions will be held, the exercises closing with a banquet at the Windsor Hotel, Thursday evening.

Some of the most interesting features of this meeting will be:

The presentation of the plan recently adopted by which it is sought to place the products of the National Formulary more thoroughly before the medical profession. (It is requested that those who have accepted the preparation of special products of the National Formulary will send the result of their work to Mr. C. J. Clark, Paris, if unable to attend the meeting in person.)

The legislative committee will have a highly interesting report.

An amendment to our by-laws, changing the annual dues from one to two dollars, will be voted on (see special notice inclosed).

The progress made on the solution of the cut-rate problem will be thoroughly discussed.

Two standing prizes of \$50 each are offered by the association for the best paper on scientific and commercial topics respectively; spirited contests are anticipated.

Reduced rates may be had on all railroads; pay full fare going, taking a receipt from the agent to that effect, and you will be allowed one-third fare returning.

Those expected to attend will please drop a postal to the local secretary, Mr. C. J. Clark, Paris, Ky.

The Thirty-fourth Commencement Exercises of the Chicago College of Pharmacy were held at the Grand Opera House on Thursday afternoon, April 26th, 1894, at 2.30 o'clock. Pres. Thiele introduced the first speaker, Mr. Bodinson, who delivered



the salutatory address. Prof. Goodman followed with a humorous sketch of "student life," and then Pres. Emil Thiele conferred the degree of graduate in pharmacy upon the 48 candidates. Prof. Hallberg next delivered an eloquent practical address on *Castanea Vesca*, showing how the pharmacist was peculiarly fitted for many of the offices and positions of trust which are now held by lawyers—worse than that, politicians; and worst of all, prominent business men. The prize microscope donated by Mr. Biroth was awarded to Rudolph Breves by Prof. Goodman, who regretted the fact that he had not another one to give Mr. Thorburn, whose work equaled Mr. Breves, but lacked somewhat the extreme nicety thereof. Mr. Thorburn then delivered a valedictory address.

The following is the list of the successful candidates; those whose names are marked with an asterisk being awarded honorable mention: J. A. Anderson, W. B. Behrens, \*F. P. Bodinson, G. W. Bohn, L. O. Brechwaldt, \*Rudolph Breves, S. Lee Caine, T. Francis Cannon, J. W. Chladek, A. H. Christenson, R. S. Collins, C. C. Cook, \*W. E. Coolbaugh, C. E. Cress, H. A. Delfosse, E. L. Fitch, H. E. Gross, \*O. Hallenberg, Fred. Hunsche, Ph. Jacobus, \*A. O. Kaczorowski, C. L. Krause, J. A. Lorenz, R. H. McKenzie, W. M. Nachway, H. A. Nielson, R. W. O'Brian, G. S. Orth, W. A. Plice, G. H. Rahlfs, C. A. Roark, W. H. Rudder, J. F. Schefcik, Fr. Seward, O. U. Sisson, F. H. Spiller, C. L. Stillman, Jno. Stuchlik, \*W. A. Stuchlik, \*J. E. Thomas, \*R. D. Thorburn, G. E. Trischman, H. H. Weissenborn, F. B. Wendt, G. A. Wiley, \*F. S. Wilson, R. E. Yarnley, E. C. Zobel.

## Trade Notes.

The first intimation of the existence of a smallpox scare in Bridgeport, Conn., was received in this city in the offices of Seabury & Johnson where a telephone order for an immense stock of sulphur candles was received shortly after the outbreak.

Schimmel & Co., Leipzig, who are represented in this country by Fritzsche Brothers, New York City, have gone to great expense in publishing an illustrated book of reference to their factories and offices in Germany and the United States. The book, which is handsomely bound in heavy cloth covers, measures 12 x 9½ and contains 68 pages, 16 of which are taken up with an historical article on perfumes and the perfume industry by Professor Flückiger, of Bern. The remainder consists of full page engravings showing rose fields, factories, laboratories and offices. The publication is one of great artistic merit, the engravings being of remarkable beauty.

H. Planten & Son, proprietors of Planten's American Medical Capsulery and Laboratory, 224 William street, New York, issue a circular to the trade in which they announce the fact that they have become proprietors of the following preparations, which they request patrons to add to H. Planten & Son's price list for 1894-5. The additions referred to are as follows: Baker's pain panacea, Brandt's Indian pulmonary balsam, Brandt's Indian purifying extract, Campbell's cholera cordial, Deshler's fever and ague pills, Kellogg's worm tea, Laycock's worm killer, Miller's hair dye, Punderson's condition powders and Tanner's German ointment.

## A New Analytical Balance.

A new analytical balance of low price and extreme sensitiveness has been placed on the market by Eimer & Amend, importers of fine chemicals and chemical apparatus, 205-211 Third avenue, New York City. The new balance is referred to as one which combines features not to be had in any other balance of equal cost. The special advantages of the balance lie in its construction and accessories, among these attention is directed to its *short beam of aluminum* graduated for rider, with adjusting screws on both ends; *sensitivity* 1/10th of a mill. with a load of 100 grammes; knife edges and planes of agate; case of mahogany, with glass top.

The price of the complete outfit is \$60 net, and as this includes weights from 1 milli. to 0.5 and riders of solid platinum, and a set of weights ranging from 1 milli. to 50 grammes. Eimer & Amend are perhaps justified in referring to it as the best and least expensive outfit yet offered.

## Notes on Prices.

### Chemicals.

Powers & Weightman, and Rosengarten & Sons, manufacturing chemists, Philadelphia, in May price currents note advances in the price of glacial acetic acid, chrysophanic acid, lunar caustic and salts of silver, mercury. Prices have declined on citric acid, lactic acid, tannic acid, aloin, benzoate ammonia, codeine, morphine, wood naphtha, zinc phosphide.

### Package Prices.

William H. Raser, drug broker and commission merchant, 32 Platt street, New York, in his price current, dated May 2, refers to the situation of quinine as stationary with only a moderate consumptive demand. Foreign bulk at 28 @ 28½c. as to brand, etc., though a round lot of mixed brands still seeks a buyer at 22½c. There is no change in schedule prices of either domestic or foreign. Referring to opium, the circular states that cables have been coming to hand during the past few days, noting a steady improvement in the Smyrna market, where it has advanced to 9s. and 9s. 3d. This market has responded somewhat to this advance and holders here are now quoting cases at \$2.30 @ \$2.35, and we are still able to place orders at the inside quotations for single cases, and \$2.32½ @ \$2.35 for 25 and 50 lb. lots. Pure powdered opium, \$3.25 @ \$3.30 now generally asked, but 50 lb. lots in bulk can yet be secured @ \$3.20. (One or two large holders have advanced their case price for gum to \$2.40.) The schedule prices of morphine of all makers remain unchanged. Antifebrine: the price has been reduced to 11c. in 500-oz. lots (freight prepaid). Arsenic is easier at 3¼c., 5 and 10 kg. lots at 3¼c. Blue vitriol though firm is still obtainable in 10 bbl. lots at 8½c. and less quantity at 3½ @ 3¼c. Japan camphor in oz. cakes in 1 and 2 lb. packages at 40c. and 5-case lots 39½c. American refined camphor in bbls. at 40c., 5-bbl lots at 3¾ f.o.b. Canary seed: tendency is easier. Hemp and rape unchanged. Coriander seed, 8c. is now asked by principal holders. California mustard seed firmer with a higher tendency. Celery seed easier, with prospect of a material decline on the coming crop. Cod liver oil, Norwegian, is easier and can be had at \$26 to \$28, as to quantity, etc. Yellow beeswax, pure, scarce, and high. Spermaceti advanced, due to scarcity and improved export demand. Cottonseed oil advanced 2c. per gal.

Carmine: active competition has caused a decline to \$2 bulk and \$2.10 in lb. Mal. olive oil lower at 58c. for yellow; 5 or 10 bbl. lots could be shaded 2c. Green olive oil at 60c. and 5 bbls. or more at 58c. Oil anise, advanced to \$1.50 and more asked. Peppermint firmer. Other essential oils without material change. Lycopodium tending higher, 54 @ 56c. now asked. Canada balsam fir lower. Balsam Peru further advanced. Balsam copaiba, pure at 83 @ 85c. Quicksilver the market has materially the past day or two, and at this writing 49 @ 50c. is named.

## Review of the Wholesale Market.

NEW YORK, May 9, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The business of the past week in drugs, dyestuffs and chemicals shows a slight improvement, though there is no disposition shown to engage in large operations, the policy with the majority being to avoid quantities in excess of the absolute requirements of the moment. The tendency to speculate is very limited, and the market in consequence has no appearance of animation. Price changes are few and of an unimportant character. Opium is firmer. Quinine is steady though not notably higher. Gum kino has advanced. Insect flowers are firmer.

### ADVANCED.

Balsam Peru.  
Mexican sarsaparilla.  
Coriander seed.  
Quicksilver.

### DECLINED.

Damiana leaves.  
American saffron.  
Cascara sagrada.

ACETANILID continues to find a moderate jobbing outlet at previous quotations. Antifebrin is lower, having been reduced to 11c. in lots of 500 ounces delivered free to any section of the United States.

ALCOHOL is without special feature and prices are steady upon the basis of \$2.18 @ \$2.24 for Trust produce, less the usual rebate.

BARKS.—Cascara sagrada is in moderate request with the current sales 5½ @ 6c. for well seasoned goods. Calsaya bark has been inquired for, and among other transactions we note sales of some 1,000 lbs. at 7c.

BALSAMS.—Copaiba continues moderately active and we are reported sales of some 5 bbls. of Para sold on private terms. Fir, Canada, is slightly easier and concessions are occasionally made to increase sales; new crop is not looked for until July, but reports of it are favorable. Peru continues scarce and wanted; pure is obtainable in a very limited way at \$1.85 and inferior goods are offering at \$1.75.

CACAO BUTTER, Dutch, is firmly held at 32½c. though the demand momentarily is very limited.

CANTHARIDES continue in fair request and we hear of numerous small sales of Chinese upon the basis of 28 @ 30c.; 70 @ 75 is wanted for Russian.

CASSIA BUDS continue in moderate request though without quotable change.

CASTOR OIL is well sustained at previous values though only light demand is experienced.

COD LIVER OIL has quieted down materially but no efforts are being made to increase the distribution. Reports from primary sources indicate a quiet market there and \$24 is quoted in instances for "prime" goods to arrive. The spot market is quiet and firm at \$27 @ \$29.

CUBEB BERRIES are meeting with more

Inquiry and numerous sales are reported at the current range.

ERGOT is in rather light requisition, but prices are steady at the previous range.

GUARANA has met with some attention during the week, though we are reported sales of two cases ex-steamer at 85c.

COLOCYNTH APPLES continue in firm position with sales reported up to some 20 cases Trieste on private terms.

INSECT FLOWERS, closed, are in demand with prices firm for the small available supply; quoted 20 @ 22c.

MENTHOL is dull and nominally unchanged.

OPUM up to a few days ago appeared to be gaining strength at primary sources and large holders were indifferent sellers in face of the uncertainty regarding the passage of the proposed tariff bill. The action of the Committee in removing the duty of \$1 as proposed as made public on Tuesday, will, it is thought, have the effect of lowering prices. In this market cases are now quoted \$2.30 @ \$2.35; broken packages \$2.22½ @ \$2.35. Powdered is held at \$3.20 @ \$3.50.

QUININE is maintained in firm position with a continued steady inquiry for broken packages. Prices of round lots are still above the ideas of buyers and no transactions of a speculative character are reported. The quoted range is 23 @ 24c. according to brand and quantity from second hands. Manufacturers' prices are steady at 25 @ 27½c. for foreign and domestic.

SAFFRON, American, is easier with 45 @ 48c. now quoted as acceptable by the principal holder.

TONKA BEANS, Angostura, are firmer and an early advance is looked for; small sales at \$1.80 @ \$2.

UVA URSI is reported very scarce at primary markets and no quotations of new crop can be obtained; for the available stock in this market 4 cents is asked.

VANILLA BEANS are nominally quoted \$6.50 @ \$13 for whole; cut are held at \$5.25 @ \$6, and we are reported numerous sales at this range.

#### DYESTUFFS.

CUTCH is in steady moderate request with holders asking 5¼ @ 6c. for prime quality. Inferior goods are held at 4¼c. as an inside price.

DIVI DIVI continues held at \$55 and is finding a moderate consuming outlet at this range.

GAMBIER continues very dull, and the absence of important inquiry has prompted slight concession so that prices are a trifle easier. Steamer stock in store may now be obtained at 4 @ 4½c. Sale goods ex-store quoted 4¼ @ 4¾c.

NUTGALLS, Blue Aleppo, are generally held at 13½ @ 14c.; the demand momentarily is limited.

SUMAC is without material change; Sicily is finding sale at the range of 75 @ 80c.

#### CHEMICALS.

ARSENIC, white, is maintained steadily at 3¼c. with a fair steady demand experienced.

BLEACHING POWDER develops no action of consequence and prices are steady at the previous range.

BLUE VITRIOL continues in active demand at 3¼ @ 4c., the latter for small lots.

BRIMSTONE, crude, remains quiet at the nominal price of \$17.50 @ \$18 for spot concessions.

CHLORATE OF POTASH does not meet with more than usual inquiry, but prices are fairly well sustained upon the basis of 13¼ @ 13¾c. for German and English crystals; powdered is jobbing at 14¼c.

CREAM TARTAR continues firm and steady with holders quoting 17 @ 17½c. for crystals and powdered.

CITRIC ACID does not change; bbls. are quoted firm at 41¼c., kegs 42c.

NITRATE OF SODA is in small supply and under good control. Prices are steady at \$2.32½ @ \$2.37½ for spot as to quantity to arrive, \$2.20 @ \$2.30 as to date, and forward shipments \$1.97½ @ \$2.

OXALIC ACID is quiet, though 6½c. is quoted steady.

QUICKSILVER has advanced in the London market to £6; in this market the range is quoted 49 @ 50c.

TARTARIC ACID continues to meet with about the usual inquiry; crystals held 21¼ @ 22c. and powdered 22 @ 22½c.

#### ESSENTIAL OILS.

ANISE continues firm at the recent advance with a moderate distribution at the quoted range.

BERGAMOT is quiet, but prices are well sustained at the previous range of, say, \$1.25 @ \$2.25.

CAJAPUT AND CAPIVI are held about as before, with, however, a rather slow distribution.

CASSIA offers freely at 82½ @ 85c., though no movement of any consequence is reported.

PEPPERMINT continues in strong position, without, however, any quotable change in values. HGH is held \$2.90 @ \$3.00; bulk quoted \$2.30 @ \$2.60 as to quality.

#### GUMS.

ALOES are quiet, without, however, any quotable change in value.

ASAFETIDA meets with about the usual inquiry and prices are nominally unchanged. We quote the range at 22 @ 25c. for best grades.

BENZONIN is in improved position and a better demand is experienced. Prices are steady upon the basis of 27 @ 40c. for Sumatra as to quality.

CAMPHOR continues in fair seasonable demand with numerous sales of domestic in barrels at 39 @ 40c.; cases are held at 40 @ 41c.

CHICLE continues inquired for, but importers' views are yet above those of buyers and business is somewhat restricted. We quote the range at 27 @ 28c.

KINO has advanced in the interval and only limited quantities are obtainable at a quoted range of \$1 @ \$1.20.

SHELLAC is not taken with any spirit and the market is quiet. Cable advices from London report a decline in the price of TN. Here DC is yet held at 35 @ 36c., VSO 33 @ 34c., and TN 25 @ 26c.

TRAGACANTH is not inquired for to any extent; the market abroad is weak and unsettled.

#### ROOTS.

GINGER, Jamaica, is jobbing fairly at 12 @ 14c. for unbleached as to quality, and 15 @ 17c. for bleached.

DANDELION, German, has been inquired for, and we note among other transactions sales of 2,000 lbs at 7½c.

GRAPE ROOT has declined in the interval and is now quoted 7c.

JALAP is in good supply but quiet, importers evincing no disposition to urge the distribution at a concession; 20c. is quoted firm.

KAVA KAVA is in good supply and offering at 14c.

SARSAPARILLA, Mexican, is meeting with the usual seasonable demand and has advanced a notch, 8½c. being now quoted as a strictly inside price.

SENEGA is firm at 38½ @ 40c, but business is confined to small jobbing orders.

#### SEEDS.

MUSTARD continues very firm with supplies of California offered very sparingly. Yellow California held at 4c. and brown at 3½ @ 3¾c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS WANTED.

SITUATION WANTED—Two A1 men want position at the seashore for the season; capable of taking entire charge; New York, New Jersey or Connecticut preferred; salary moderate; first-class references. Address "Trional," this office.—18.

SITUATION AS ASSISTANT wanted by graduate of Ontario College of Pharmacy; Phm. B. of University of Toronto; will go anywhere and accept moderate salary. Address F.W., in care of Dunscomb & Frith, 40 Exchange Place, New York.—20.

POSITION WANTED—A young temperate man, 22 years, wishes a position in drug store in this state; can give good reference. Address "Doctor," 138 Western Avenue, Albany, N. Y.—18.

DRUG CLERK, N. Y. State and Brooklyn license, German-American, 10 years' experience, low salary, desires permanent position, country or city; reference. "Xylol," care this office.—19.

#### BUSINESS OPPORTUNITIES.

FOR SALE, fountain, all complete; A. D. Puffer make; eight syrups; in good order. W. W. Roberts, Boonville, N. Y.—18.

DRUG STORE—For sale; most desirable location; business street of a railroad and manufacturing town; 12,000 population; Eastern Pennsylvania; established two years; receipts \$1,000 each year; dwelling (all conveniences); good reasons for selling. Address "Opportune," at this office.—18.

DRUGGIST WISHES TO RETIRE; rare chance to buy a paying first-class store, Westchester Co., New York. Address Marsh, 87 Hamilton street, East Orange, N. J.—18.

FOR SALE—Drug store in an Indiana town of 10,000 population; no pharmacy law; invoices \$3,000 to \$4,000; will sell with or without soda fountain; no dead stock; good location on a corner opposite the post-office; reason for selling, have two stores; can reduce the stock if wanted; cheap rent. J. D. Denon, Terre Haute, Indiana.—19.

FOR SALE—About \$2,000 will buy the only drug store in a nice town of 1,200, with a surrounding territory of 5 miles north, 5 miles south, 10 miles east and 8 miles west; well stocked; cash trade; reason for selling, have two stores; a rare chance for a cash purchaser. Address "Oxalic Acid," care AMERICAN DRUGGIST.—20.

FOR SALE—Nice drug business; fine location; established five years; will take fair price cash. No. of store, 30 State street, Bridgeport, Conn.—19.

FOR SALE—New Remedies by Castle & Rice, Vols. 3, 5-12 incl. AMERICAN DRUGGIST, Vols. 13-15, 18-19, PHARMACEUTICAL RECORD, Jan.-Jun., 1886. Address "Bromine," care this office.—10.

FOR FIFTY CENTS I will send the formula for an elegant cologne very similar if not superior to Hoyt's German cologne; can be cheaply and easily made. Send to "Galen," care this office.—20.

FOR SALE, in Brooklyn, a corner drug store in a growing neighborhood; last year's increase of business 75 per cent.; good chance for young man with small capital; lease includes four rooms back of store. For particulars address "Quinine," care of RECORD.—19.

FOR SALE, Bradley ice cream cabinet in use one month only; price \$10. Fassett & Messaros, cor. Lenox Avenue and 132d street, New York.—19.

TO RENT in Northampton, Mass., a corner store new, never occupied, opposite the Academy of Music and Smith's College; 80 x 70 feet; just the place for a drug store; 1,300 college girls; population 15,000; price \$700. Address E. W. Higbee (owner) 81 Main street, Northampton, Mass.—17.

#### POSITIONS VACANT.

AGENTS WANTED calling on drug trade to sell my goods from catalogue, as a side line. F. N. Burt, manufacturer druggists' boxes and labels, Buffalo, N. Y.—23.

# American Druggist and Pharmaceutical Record.

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VOL. XXIV. No. 20.

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WHOLE No. 299.

AMERICAN DRUGGIST PUBLISHING COMPANY,

37 College Place, New York.

A. R. ELLIOTT, President.

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THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

THE prominence given during the past week or two to the actions of the CHESEBROUGH MANUFACTURING COMPANY has had its good effect. The company we understand, have decided to abandon the methods which gave rise to so much complaint, and this slight concession to public opinion is a proof that something can always be gained by agitating matters as an organized body. The New York Branch of the Interstate League is to be congratulated upon the concession gained. Of our own work in directing attention to the preposterous claims of the CHESEBROUGH COMPANY, we shall say nothing. The fact that all action looking to the prosecution of druggists was dropped by the CHESEBROUGH COMPANY soon after the publication of the editorial in last week's issue is sufficient testimony to its value.

## HONORS TO AMERICANS.

HONORARY membership in the Pharmaceutical Society of Great Britain is a much coveted honor. The list of members is limited to fifty and comprises the names of the most eminent exponents of chemistry and pharmacy of all countries. Europe is represented by ATTFIELD, the pharmaceutical chemist, and DEWAR, the physicist; Scotland by FRASER, the pharmacologist, and MACLAGAN the chemist; Germany has SACHS, HESSE and LADENBURG; France numbers PASTEUR, PETIT and PLANCHON; Russia is honored by MENDELEEF, RUSSOW and TRAPP; Austria by VOGL, WALDHEIM and PASCHKIS; Switzerland by FLUCKIGER, MOELLER and TSCHIRCH; and the United States by REMINGTON and SQUIBB.

Professor REMINGTON was elected an honorary member of the society on May 2, 1894, sharing the honor with Sir FREDERICK ABEL, Bart., F.R.S., and Professor SIDNEY RINGER, M.D., F.R.S.

At the same meeting Professor H. H. RUSBY was elected a corresponding member of the society, with Dr. WATT of Calcutta.

## THE LIQUOR LAW.

Chapter 402 of the laws of 1892 of the State of New York reads as follows:

SECTION 1. Commissioners of excise may grant both a druggist's license and a storekeeper's license to a duly licensed pharmacist, but no other license than a storekeeper's license shall be granted to any person holding a druggist's license.

§ 2. This act shall take effect immediately.

This was amended by chapter 479 of the laws of 1893 to read as follows:

§ 1. Commissioners of excise may grant either a druggist's license or a storekeeper's license to a duly licensed pharmacist, but no other license than a druggist's license or storekeeper's license shall be granted to any person duly licensed to practice pharmacy.

§ 2. This act shall take effect immediately.

Chapter 480 of the laws of 1893 which bears the title of An act to amend chapter 401 of the laws of 1892 entitled An act to revise and consolidate the law regulating the sale of intoxicating liquors seems to disregard the preceding chapter for subdivision 5 of section 19 reads as follows:

§ 5. A license to the keeper or keepers of a drug store, permitting sales therein only upon a physician's written prescription, to be but once used, of strong or spirituous liquors, wines, ale or beer not

to be drunk on the licensed premises, which shall be known as a druggist's license, and for which the fee shall be twenty dollars. A druggist shall not be licensed under this subdivision unless he is a duly licensed pharmacist and shall not be granted any other license under this act. But nothing herein contained shall be construed to prevent the renewal or continuance of any license which existed for premises occupied as or connected with a drug store on the thirtieth day of April, 1892.

Subdivision 4 of section nineteen of this same act defines a storekeeper's license as follows, saying that the excise board may grant:

4. A license to the keeper or keepers of a store permitting sales therein of strong and spirituous liquors, wines, ale, or beer not to be drunk on the licensed premises, which shall be known as a storekeeper's license, and for which the fee shall be, if such premises shall be in a city, not less than thirty dollars nor more than two hundred and fifty dollars, and if such premises shall be in a town, not less than thirty dollars nor more than one hundred and fifty dollars.

Arguing from these data it would seem that chapter 479 is practically nullified by subdivisions four and five of section nineteen of chapter 480 as quoted above. For in subdivision 5 it is distinctly stated that the pharmacist "shall not be granted any other license under this act" than the twenty-dollar prescription license. The only storekeeper's license to be had is that granted under this act according to subdivision four as indicated above.

The passage of chapter 479, however, of the laws of 1893 shows an intention on the part of the legislature to allow the pharmacist to take out a storekeeper's license if he so choose and while literally superseded by the provisions of chapter 480 [vide supra] it is probable that should the matter ever come into court the druggist would be supported in a claim that he was entitled to a storekeeper's license. The excise commissioners in some towns may have ignored chapter 479 of the laws of 1893 and, acting under the section nineteen subdivision 5 of chapter 480, have refused to issue any storekeeper's license to pharmacists.

Our remarks on this subject in conjunction with the proposed change in the pharmacists' license were based upon what appears now to be an erroneous assumption, viz., that the subdivision 5 of section 19 was really final, whereas section 479, being in the nature of special legislation, seems to be in practice at least final.

### Pharmacy as a Profession.

This was made the subject of a valedictory address to the class of 1894 of the Philadelphia College of Pharmacy, by Prof. Samuel P. Sadtler, Ph.D. In the course of his remarks Professor Sadtler said:

"Another of the drawbacks to the proper recognition of pharmacy as a profession is the comparison so often drawn between it and the related profession of medicine, and drawn, I need hardly say, in most cases to the disadvantage of the former. It is not alone drawn by the doctor, who from the time he leaves the medical college calmly draws a line between himself and the 'laity,' as he calls the rest of the world. This superiority of the medical profession is too often conceded as a matter of course by the pharmacist, who feels the necessity of gaining the good will of the medical profession living in his neighborhood as a question of business. Is it any wonder then that the public take him at his own estimate, and grow accustomed to give a respect to the one profession that they deny to the other? This difference in valuation is only encouraged when the pharmacist proceeds to demonstrate his belief in it by taking up medical studies, even after years of practical business life, and adding the medical degree to that of graduate in pharmacy. I do not wish to be misunderstood here. Many young men enter upon the study of pharmacy, and pursue it diligently, with the full intention from the beginning of following it by studies in medicine. For such a plan I have nothing but commendation. I have repeatedly heard medical men, who had pursued this plan, acknowledge the invaluable aid that the thorough grounding in a knowledge of drugs and medicines and their preparation acquired in a college of pharmacy gave them in the after practice of medicine. But cannot the graduate in pharmacy, who has had no such plan of study, who has only started out to acquire a pharmaceutical education feel that he has a worthy profession before him, if he will but strive to make himself worthy of it? He has had an insight during his college years into the methods of work in chemistry, both analytical and synthetical, in operative pharmacy, the field of which is becoming wider every day, in microscopical study of plant tissue and drug structure. Is there, then, nothing that promises results for him in all this, results that will bring him both pecuniary reward and reputation?"

### Note on Extract of Aconite.\*

By P. CARSON.

Six samples of extract of aconite were obtained from various wholesale houses. These are referred to below as Nos. 1 to 6.

**Color.**—Nos. 1, 2, 3, 5 and 6, had the ordinary appearance and color of a green extract. No. 4 was of a dark brown color, somewhat resembling extract of opium.

**Consistence.**—Nos. 1, 3, 6, may be described as fairly soft. Nos. 2 and 5 as very soft, and No. 4 hard.

The moisture and ash were determined in the usual way, and the latter was examined for copper, with negative results.

The ether-soluble alkaloids were next determined by the following process: Ten grammes of the extract were dissolved in water, 5 cc of acetic acid and 25 cc. of lead-acetate solution (1 in 4) added. The filtrate was measured, the lead precipitated by means of sodium phosphate, and

the liquor again filtered. A quantity of the filtrate equal to 5 grammes of the extract was shaken once or twice with ether while acid, the ether separated, the liquid rendered alkaline, and the alkaloid shaken out by ether in the usual way. The ether was evaporated off, and the alkaloid weighed. The results obtained were as follows:

No.	Color.	Consistence.	Moisture.		Ash.		Ether-sol. alkaloids.
			Per cent.	Per cent.	Per cent.	Per cent.	
1	Greenish-brown	Fairly soft	24.6	15.0			.27
2	Greenish-brown	Very soft	28.8	16.0			.30
3	Brownish-green	Fairly soft	19.8	19.4			.16
4	Brown	Hard	21.6	18.09			.28
5	Greenish-brown	Very soft	28.7	14.6			.20
6	Greenish-brown	Fairly soft	27.18	15.5			.17

Now, the yield of extract from the fresh herb is about 7 per cent. and taking Squire's figures of 3 per cent of alkaloids in the dry leaf as being .056 per cent. in the fresh, we should expect a well-prepared green extract to contain .8 per cent. of alkaloids, whereas the average of the above table is .218 per cent. There is, then, obviously, a considerable loss of alkaloid during the manufacturing process. A considerable variation is also to be noticed in the alkaloidal content of the different samples—a variation having a most important effect on the value of the extract as a therapeutic agent.

Thus, the maximum dose of the extract is 1 grain, containing, according to an average of the above figures, .0021 grain of ether soluble alkaloids. But the dose of the tincture, which may be regarded as containing .05 per cent. of alkaloids, is 15 minims, or .007 grain of alkaloids. Hence a maximum dose of the tincture is more than three times more active than a maximum dose of the extract.

It being impossible to subject a green extract to any accurate process of standardization, it would seem expedient for the use of this extract to be discontinued, or for it to be substituted by some more reliable preparation.

My thanks are due to my employers, Messrs. Southall Brothers & Barclay, in whose laboratories these experiments were conducted.

### Vanilla in Tahiti.

The British Consul in Tahiti (Polynesia) has just submitted an exhaustive report on the culture of the plant in his district, from which we take the following passages:

The cultivation of vanilla has been carried on in the Island of Tahiti for several years, but is limited to a few districts only, that of Papara supplying more than half the quantity sent into the market.

The native mode of culture is, as a rule, simply to plant the cuttings of the vine under the shade of trees and then to leave them to grow and twine round supports as best they can.

Shade, though not dense, is necessary to insure a successful crop of beans. About one year from the time of planting the vine commences to flower, and the inoculation, which then takes place, must be carefully attended to; this is generally carried out by women and children whose light hands are best suited for the delicate operation. In from six to nine months from the time of inoculation the bean will be ripe for picking and curing.

The native method of curing is to keep the beans alternately indoors rolled in cloths and outdoors during the day spread on mats exposed to the sun for periods of

three or four days at a time, until they are dried and ready for the market, but many native planters now dry their vanilla in boxes with glass covers.

At the Temarua plantation, which is under foreign management, great attention is paid to trimming the plants and keeping the ground clear from weeds, and the vines are trained on well-selected supports invariably carefully attended to.

The boxes used for curing the beans are made of hard wood with glass covers, and measure 6 by 4 by 2 feet in depth. They are usually filled three-quarters full, the beans being placed on a blanket in the bottom of each box and covered with a double thickness of blanket at the top. The glass lids are then put on and the boxes exposed to the sun for about fifteen days, when the beans are generally found to be sufficiently sweated to admit of their removal to the drying house, which is constructed of corrugated iron and contains three tiers of wire shelves. The beans are laid on the top tier first and are then moved to the second and third in succession as they gradually dry, and remain on the latter until they are perfectly dry and fit for the market.

The Temarua plantation consists of about 51 acres.

The annual expenses, with an experienced foreman receiving £200 per annum, amount to about £400.

The crop varies from 90 to 260 lbs. per acre per year. An average of 175 lbs. at the medium price of 4s. per lb. leaves a very fair profit.

The Tahiti vanilla is inferior to that of Mexico, Bourbon and Mauritius, and this drawback is not improved by the careless manner in which the native, and even the European, dries and ties his bundles of beans for export. The following figures show the exports of vanilla from Tahiti during the last ten years:

	Year.				
	1883.	1884.	1885.	1886.	1887.
Weight, lbs.	2,726	5,454	4,919	8,408	7,020
Value, £...	8.8	1,636	1,475	2,522	3,044

	Year.				
	1888.	1889.	1890.	1891.	1892.
Weight, lbs.	12,569	8,789	15,882	24,585	25,560
Value, £...	5,028	1,758	3,248	7,456	4,418

**Paraform.**—M. Aronsohn thus designates polymerized formic aldehyde, a substance recommended for use in the intestinal tube as an antiseptic. It is a white crystalline substance, insoluble in water, and Aronsohn claims that of the antiseptics compared with it— $\beta$  naphthol, iodoform, dermatol, salol, and benzonaphthol—the first-named is the only other substance that at all completely checks the development of bacteria. Paraform, however, is superior to  $\beta$ -naphthol, a 1:1000 solution acting upon typhoid bacilli as effectually as a 1:1000 solution of the latter. Again, 0.05 Gm. of paraform sterilized 200 Gm. of urine, while 0.15 Gm. of  $\beta$ -naphthol was required for the same purpose. A dose of five grammes of paraform did not produce any ill effects when taken, and its physiological action resembles that of calomel (*Sem. Med.*, through *Pharm. Journ.*).

\*Communicated to the Midland Pharmaceutical Association, April 19, 1894.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Phosphorous Matches.** W. C. & Co.—Ordinary phosphorous matches are small slips of wood which have been dipped in sulphur and afterward tipped with a paste capable of ignition by friction. This paste is composed of:

Common phosphorous.....	4 parts
Potassium nitrate.....	16 parts
Red lead.....	3 parts
Strong lead.....	6 parts

Another formula for the tipping compound reads:

Ordinary phosphorous.....	9 parts
Potassium nitrate.....	14 parts
Binoxide of manganese.....	14 parts
Glue.....	16 parts

Melt the glue at 212° F., gradually add the phosphorous, which must be well stirred into the liquid; then add the potassium nitrate and coloring matter. Keep the past, at a regular temperature of about 97° F. by means of hot water under the marble or cast-iron slab on which it is spread while the matches are being dipped.

**Hair Restorers.**—H. C. writes: "Kindly give me a formula for a hair tonic and coloring to resemble Hall's, Allen's or Ayer's."

We give below the formulas said to represent each of the preparations named:

### HALL'S HAIR RENEWER.

Sulphur precipitated.....	1 dram
Lead acetate.....	1 dram
Salt.....	3 drams
Glycerin.....	8 fl. ounces
Bay rum.....	2 fl. ounces
Jamaica rum.....	4 fl. ounces
Water.....	16 fl. ounces

Mix.

### ALLEN'S HAIR RESTORER.

Sulphur.....	6 parts
Lead acetate.....	8 parts
Glycerin.....	100 par s
Water, flavored.....	200 parts

Dissolve lead acetate in the water, then add the glycerin and sulphur. Any aromatic water may be used for making the restorer.

### AYER'S HAIR VIGOR.

Lead acetate.....	3 parts
Sulphur.....	2 parts
Glycerin.....	14 parts
Water.....	80 parts

**Thickening of Rose Water.**—H. B. C. writes: "Can you tell me why rose water made from oil of rose and boiled water thickens upon standing. And will you kindly give a formula for a stable water?"

The thickening complained of is due to the decomposition of the rose water and formation of a fungoid growth or micro-organism. It is difficult to prevent this. The best means are to use boiled distilled water and cotton which has been rendered aseptic by exposure to dry heat.

One advantageous method of preparing stable rose water is to add the requisite amount of oil (say 4 drops to each pint of water) to filtering paper which has been torn into small pieces. The filtering paper soaked in this manner is then introduced into distilled water warmed to between 35° and 45° C. (95°–135° F.) and shaken thoroughly and frequently until

the liquid cools. It is then filtered in the usual manner.

Jos. W. England has proposed the following formula:

	Parts
Oil rose.....	2 (2 minims)
Alcohol.....	30 (60 minims)
Calc. phosph. prec.....	40 (60 grains)
Water to make.....	5,000 (2 pints)

Triturate, in a mortar of broad surface, the oil dissolved in the alcohol, with the precipitated calcium phosphate, until a dry powder is secured and all the alcohol has volatilized, then add the water in small portions at a time, stirring after each addition, until the intended quantity to be made is completed. Lastly filter; returning to the filter the first portions, if cloudy.

**Stoughton Bitters.** E. McA. P.—This is stated to have the following composition:

Gentian.....	3 ounces
Serpentaria.....	2 ounces
Orange peel.....	2 ounces
Calamus.....	4 drams
Cardamom.....	2 drams
Red saunders.....	1 ounce
Alcohol.....	q. s.
Water.....	q. s.

Reduce the solids to a moderately fine powder, moisten them with a mixture made from 2 volumes of alcohol and 6 volumes of water, pack in a percolator, and percolate until 1 gallon of liquid is obtained.

**Red Ink.** P. T.—This can be made conveniently and cheaply from eosin—one of the aniline reds. Proceed as follows:

Eosin (water soluble).....	2 drams
Alcohol.....	2 fl. ounces
Mucilage.....	1 fl. ounce
Water, enough to make.....	16 fl. ounces

Dissolve the eosin in about 12 fluid ounces of water, a small portion of this being poured hot upon the eosin contained in a bottle. Next add the alcohol, and shake; finally add the mucilage and enough water to make 1 pint.

**Pill Coating.**—M. I. G. writes "Will some one please tell me how to coat pills, giving them a smooth, glossy appearance, with a yellow tint."

A varnish is what is evidently required here. A useful application of this kind may be made by dissolving 1 ounce of balsam tolu in 8 ounces of ether. The "Art of Dispensing" recommends the solution to be made from tolu syrup residues. Martindale, according to the same authority, recommends a solution of sandarach 1 part in 1 of absolute alcohol. Hager recommends 5 parts of powdered mastic, and 15 of balsam tolu to be dissolved in 25 of absolute alcohol, and 80 of ether. Either of these solutions is suitable for the dispensing counter. The pills are placed in a covered pot, a few drops of the varnish, sufficient to wet all the pills, are dropped upon them, and the pot rotated so as to cover all the pills equally. They are then transferred to a pill tile or any other earthenware surface, so that they may be detached from each other; occasionally they are turned until the coating is quite hard.

**Salophen.**—H. A. B. writes: "Kindly inform me how salophen is manufactured, or what would be a good substitute for it."

Salophen is a derivative of salol. It is prepared by esterizing p-nitrophenol with salicylic acid, reducing the nitro compound with tin and hydrochloric acid to an amido group and acetylate the latter. Salophen contains 51 per cent of salicylic acid, and appears in small thin flakes, without odor or taste, and of a neutral reaction. In the animal organism it splits into salicylic acid and acetyl-p.

amidophenol. Salol is perhaps the substance which resembles it most; but only a physician can decide as to its virtues as a substitute for salophen.

**St. Jacob's Oil.** G. C. M.—This is understood to have a composition resembling the following:

Gum camphor.....	1 ounce
Chloral hydrate.....	1 ounce
Chloroform.....	1 ounce
Ether.....	1 ounce
Tinct. opium.....	1/2 ounce
Oil organium.....	1 ounce
Oil sassafras.....	1 ounce
Alcohol.....	1/2 gallon

"Squibb's Vinegar." G. P. H.—We do not believe that Squibb makes any attempt at secrecy in the preparation of his acids. Why not address your inquiry direct to the firm, E. R. Squibb & Sons, Brooklyn, N. Y.

**Phalon's Paphian Lotion.** I. W. L.—We are unable to place this compound. Perhaps some one or more of our readers will oblige.

## Correspondence.

### "Vaseline vs. Petrolatum."

**Editor AMERICAN DRUGGIST:**

In regard to this much agitated question, and the manner in which the druggists of this city have been treated by the proprietors of vaseline, it seems to me the duty of every druggist to denounce their actions with voices which shall echo for all time to come. The only recognized preparation of petrolatum can soon be brought to the front if every druggist will do his duty and leave the proprietary article to be sold in dry goods stores where it has so long been handled at prices with which druggists cannot undertake to compete. That the Chasebrough Mfg. Co. have an undisputed right to the use of their trade mark is of course beyond doubt, and I believe that at least 95 per cent. of the druggists respect their rights and do not infringe upon them. There may be a few guilty ones, but the percentage seems far too small to justify the company in summoning the guilty and the innocent alike before them under threats of prosecution.

I believe druggists generally will repudiate the proprietary article to a great extent, educating the public up to the knowledge that petrolatum is the only recognized preparation of the U. S. Pharmacopoeia, all others being proprietary articles.

M. F. BENDER.  
New York, May 14.

### A New Dodge.

**Editor AMERICAN DRUGGIST:**

I send you the inclosed card and expect to hear that you have given it a prominent place in your curio department.

For exquisite gall I think this takes the cake. Will you kindly give me your estimate of it?

JOHN WINTRICH, Ph.G., M.D.  
New York, May 9.

The card referred to is a postal bearing on one side the address, "P. Harold Hayes, M.D., Buffalo, N. Y." and on the other the following words:

"Will you kindly give me the address of any person or persons you know in your town or elsewhere who suffer with asthma or hay fever? Please write P. O. and State distinctly."

We hope that no pharmacist will lend himself to this business. The card is an insult to the intelligence of every one to whom it is sent.



## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in their issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place, New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1904.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

## Answers to Questions; Seventh Series.

## 71. Chloral hydrate, bromides and opium.

Chloral hydrate is a hypnotic, or sleep producer, acting upon the intellectual centers of the brain and also depressing the motor tracts of the brain and spinal cord, sometimes paralyzing the heart. It is used to produce sleep where sleeplessness is due to nervousness and not to pain. It is a valuable antidote for strychnine poisoning, delirium tremens and tetanus.

Bromides (potassium, etc.) act upon the intellectual centers of the brain, slow their action; depress the sensory side of the cord; decrease excitability and lessen the ability to recognize pain. They also, specially, lessen reflex action. Bromides are used to correct over excitement, but should never be used where the nervous symptoms are due to depression. Bromides are among the best remedies for epilepsy and seasickness.

Opium, in large doses, quiets the brain but excites the spinal cord, it is especially active in paralyzing the centers of the medulla which control respiration. It is used to lessen pain and insomnia, to reduce inflammation, over secretion and systemic strain.

72. Strychnine, belladonna, ammonia, alcohol and coffee or caffeine. Coffee as an antidote for opium. Strychnine as an antidote for chloral.

73. Atropine salts. They are generally exhibited by dropping into the eye from 1 to 4 drops of a solution of the salt (3 or 4 grains of the salt in an ounce of distilled water). Gelatine disks which have been made to absorb the solution and then dried are sometimes used in place of the solution.

74. Liquor ferri subsulphatis is probably the most powerful styptic known, but tannin is the more generally used.

75. Pulvis ipecacuanhæ opii.

76. Antipyrine and acetanilid.

77. Mistura glycyrrhizæ composita.

78. Apomorphine.

79. Pilocarpus (jaborandi).

80. Elaterium.

## Names of Students Whose Grade Stood 75 on the Sixth Series.

W. J. Adams, Manchester. E. Q. Anewalt, Philadelphia.

E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. G. W. Barksdale, Richmond, Va. J. C. Boyer, Wiconisco, Pa.

Edward F. Deen, Lancaster, Pa. W. E. Bruce, Boston, Mass. T. M. Broadus, Gordonsville, Va. William Brown, New York City. T. H. Brenneman, Harrisonburg, Va.

Roscoe Brown, Oxford, Pa. Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Chas. L. Chapple, Minneapolis, Minn. W. Scallin, Mitchell, S. Dak. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp, Mount Morris, N. Y. T. J. Derrberry, Centerville, Tenn.

H. J. Force, Newark, N. J. William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Hooisick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

J. W. Latcher, Edinburgh, Saratoga Co., N. Y. A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lavery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavale, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn. Arthur Morin, Houghton, Mich.

W. B. Nethery, Toronto Junction, Ont. Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala. A. V. Rand, Wolfville, N. S. M. E. Read, Waukeon, Ohio.

Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T. Albany. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa.

Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.

W. H. Van Strander, Winsted, Conn. Bertie Ward, Orange, N. J. Miss Emma A. Wiggins, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

## Questions; Ninth Series.

## POSOLOGY.

References: The Dispensatories, Lochman's Dose and Price Labels, Rice's Posological Tables, etc.

101. If a dose of a remedy for an adult be 60 grains what would be the dose for a child of eighteen months under ordinary circumstances?

Give the usual single and daily dose (as much as is given in the course of 24 hours) of the following for an adult:

102. Tincture of gelsemium.

103. Tincture of aconite.

104. Fluid extract of cinchona.

105. Oil of savin.

106. Oleoresin of male fern.

107. Extract of physostigma.

108. Oil of turpentine.

109. Glycerite of carbolic acid.

110. Solution of subsulphate of iron.

## Students' Column.

## Organic Materia Medica of the U. S. P.

## Absinthium. Wormwood.

BOTANICAL NAME... Artemisia.  
NATURAL ORDER... Compositæ.  
HABITAT... Northern Africa, Europe.  
PROPERTIES... Stim., tonic and anthelmintic.  
PARTS USED... The leaves and tops.

Dose—Powd. Gm. 1.30—250.

## Acacia. Gum Arabic.

BOTANICAL NAME... Acacia Senegal.  
NATURAL ORDER... Leguminosæ.  
HABITAT... Kordofan in E. Africa, imp. from Alexandria, also Arabia and Senegal.  
PROPERTIES... Demulcent and palliative.  
PART USED... The gum.  
PREPARATIONS... Mucil. Acac.; pulv. cret. arom.

Dose—Powd. Gm. 1—4; Mucil. Gm. 4—16.

## Aconitum. Aconite.

BOTANICAL NAME... Aconitum Napellus.  
NATURAL ORDER... Ranunculaceæ.  
HABITAT... Germany, France and Switzerland.  
PROPERTIES... Cardiac sedative; nervous depressant; anti-neuralgic.  
PART USED... The tubers.  
PREPARATIONS... Extract; fluid extract; tincture.

Dose—Extract Gm. 0.06—0.013; Fluid Extract Cc. 0.03—0.06; Tinct. Cc. 0.06—0.30.

## Allium. Garlic.

BOTANICAL NAME... Allium Sativum.  
NATURAL ORDER... Liliaceæ.  
HABITAT... Central Asia; cultivated in Europe and North America.  
PROPERTIES... Stim., anti-spasmodic, expectorant and diuretic.  
PART USED... The bulb.  
PREPARATION... Syrup.

Dose—Fresh bulb or syrup Cc. 2.00—4.00.

## Aloe Barbadosensis. Barbadoes Aloes.

BOTANICAL NAME... Aloe vera.  
NATURAL ORDER... Liliaceæ.  
HABITAT... Barbadoes.  
PROPERTIES... Purg. and emmenagogue in large, tonic and stomachic in small doses.  
PART USED... The inspissated juice of the leaves.

Dose—Powd. Gm. 0.20—0.60; Aloes Gm. 0.06—0.12.

## Aloe Socotrina. Socotrine Aloes.

BOTANICAL NAME... Aloe Perryi.  
NATURAL ORDER... Liliaceæ.  
HABITAT... Socotra, imp. from Bombay.  
PROPERTIES... Purgative [and emmenagogue].  
PART USED... The inspissated piece of the leaves.  
PREPARATIONS... Purified aloes; extract.

Dose—Powd. Gm. 0.20—0.60.

## Althæa. Marshmallow.

BOTANICAL NAME... Althæa officinalis.  
NATURAL ORDER... Malvaceæ.  
HABITAT... Europe, New England coast and New York.  
PROPERTIES... Emmollient and demulcent.  
PART USED... The root deprived of the brown corky layer.  
PREPARATION... Syrup.

Dose—Syrup Cc. 2.00—4.00.

## Ammoniacum. Ammoniac.

BOTANICAL NAME... Dorema ammoniacum.  
NATURAL ORDER... Umbellifera.  
HABITAT... Deserts and barren regions of Persia and Tartary.  
PROPERTIES... Expectorant; antispasmodic.  
PART USED... The gum resin.  
PREPARATIONS... Ammoniac plaster with mercury. Emulsion of ammoniac.

Dose—Gm. 0.60—2.00 in pill and emulsion.

## Amygdala Amara. Bitter Almond.

BOTANICAL NAME... Prunus amygdalus var. amara.  
NATURAL ORDER... Rosaceæ.  
HABITAT... California, Spain and France.  
PROPERTIES... Sedative and poisonous.  
PART USED... The seed.  
PREPARATION... Syrup of almond.

Dose—Syrup Cc. 4.00—8.00.

## Amygdala Dulcis. Sweet Almond.

BOTANICAL NAME... Prunus Amygdalus var. dulcis.  
NATURAL ORDER... Rosaceæ.  
HABITAT... California, Spain, Portugal, Barbary and France, etc.  
PROPERTIES... Demulcent.  
PARTS USED... The seed.  
PREPARATIONS... Emulsion and syrup.

Dose—Emulsion and syrup Cc. 4.00—8.00.

## Amylum. Starch.

OBTAINED FROM... Zea Mays.  
NATURAL ORDER... Graminæ.  
HABITAT... United States.  
PROPERTIES... Emmollient.  
PARTS USED... The fecula of the seed.  
PREPARATION... Glycerite of starch.

Dose—Used externally, and as a vehicle for emmata.

(To be continued.)

### Approaching Pharmaceutical Meetings.

MAY 29.

The Kansas Association meets at Salina. Local secretary, Emil Arner.

JUNE 5.

The Arkansas Association meets at Hot Springs. Secretary, J. W. Beidelman, Little Rock.

The Ohio Association meets at Cincinnati. Local secretary, A. Wetterstroem.

The Utah Association meets at Provo. Secretary, C. H. McCoy, Salt Lake City.

JUNE 12.

The Minnesota Association meets at Lake Minnetonka. Secretary, C. T. Heller, St. Paul.

The Missouri Association meets at Excelsior Springs. Local secretary, C. L. Cowens.

The Pennsylvania Association meets at Neversink Mountain House. Local secretary, J. B. Raser, Reading.

JUNE 13.

Indiana Association meets at Evansville. Local secretary, George W. Haynie.

JUNE 26.

The New York Association meets at Saratoga. Local secretary, C. F. Fish.

JULY 10.

The Virginia Association meets at Blue Ridge Springs. Local secretary, W. B. Spickard.

### The Louisiana Association.

The Louisiana Pharmaceutical Association held its twelfth annual session in New Orleans on May 1. President P. A. Capdau called the meeting to order, and according to custom read an address detailing the work of the association during his year of office.

The president's address was received and referred to the following committee: Messrs. L. F. Chalin, M. T. Breslin and T. J. Labbe, who were instructed to take consideration of the points presented and report to the association.

Treasurer Eugene Lalmant reported receipts during the year, \$516.90; disbursements, \$307.47; balance in treasury \$209.43; received since the end of the year, \$37; total balance, \$246.48.

Mrs. Rudolf, the secretary, reported that the committee on trade interests had conferred with the Wholesale Druggists' Association, and a circular had been issued by them to the pharmacists of the State. The executive committee had held frequent meetings during the year and had accomplished much good.

A proposed new pharmacy law was submitted by T. J. Labbe, chairman of the committee on legislation, and four sections of the bill were finally indorsed, and the committee instructed to recommend its passage to the legislature.

The second day's session was opened by the reports of the committee on president's address indorsing the recommendation to found a monthly pharmaceutical publication as well as several other suggestions contained in the address.

The report submitted by W. T. Tayler chairman of the committee on education, criticised the laxity shown in the standards of pharmaceutical education, and spoke hopefully of the tendency of the well established universities to establish adequate courses in pharmacy.

Much discussion followed the bringing up of section 5 and 6 of the proposed amendments to the pharmacy laws. The sections provide for the labeling of poisons as such and fixed the penalty for a violation of the law.

The report of the corresponding secretary, J. A. Legendre, was submitted and accepted as was also that of M. T. Breslin, chairman of the membership committee, and A. K. Finlay for the committee on trade interests.

M. T. Breslin opened the third day's session with his report as delegate to the international congress, which was followed

E. Brand, chairman of the executive committee, and President Capdau paid high tributes to Mrs. Rudolf as a secretary.

The members showed their appreciation of her efficient services by electing her by a rising vote.

Messrs. J. A. Legendre, F. A. Godbold, J. F. Chalin, Dr. J. Gazzo and William Levy were selected as delegates to the American Pharmaceutical Association.

The newly elected officers were then installed and the association adjourned to meet on the second Tuesday in May, 1895.

On Thursday evening after the final adjournment the annual banquet of the association was served at West End during which President Gazzo announced the following committees:

On Trade Interest—Lucien E. Lyons, Eric Brand, P. L. Viallon.

On Pharmacy and Queries—R. N. Girling, Alex. K. Finlay and A. L. Metz.

On Legislation—L. F. Chalin, Wm. Graner, C. M. Brooks.

On Adulteration and Deterioration of Drugs—C. L. Keppler, R. N. Girling and P. Asher.

On Pharmaceutical Education—Dr. E. U. Bourg and T. J. Labbe.

On Memorial—Alex. K. Finlay, Eric Brand and M. T. Breslin.

On Entertainment—E. Lalmant, Wm. Graner, L. E. Lyons, S. L. Twichell and W. M. Levy.

On National Formulary—Mrs. E. Rudolf.

On Membership—R. T. Gibbs, E. N. Roth, L. L. Abbott, G. S. Brown and G. D. Feldner.

DR. JOHN GAZZO.

Dr. John Gazzo, the newly elected president of the Louisiana Pharmaceutical Association, was the first vice-president last year. He was born in the parish of Lafourche, Aug. 11, 1856. He was educated in Thibodaux College, Pass Christian College, Jefferson Academy, in New Orleans, and the State University, at Baton Rouge. He was a medical student under the late Dr. Samuel Logan.

For ten years Dr. Gazzo was coroner of the parish of Lafourche, having been elected to the office two terms by a very large majority of the people, irrespective of party. He has been a practitioner of medicine at Raceland, where he owns a drug store, for a number of years. More than ten times has he been a director, and often the president of the organizations in his parish for the purpose of raising funds for real charity. Though he has never been a candidate for office, he has often been chosen by the people to look after their political interests. Dr. Gazzo is very popular with the members of the association, and the prediction is made that he will do much to secure the proposed legislation desired relating to the laws governing the practice of pharmacy.



LOUISIANA PHARMACEUTICAL ASSOCIATION.

1.—DR. JOHN GAZZO of Raceland, President.

4.—P. A. CAPDAU of New Orleans, Retiring President.

5.—L. F. CHALIN of New Orleans, Ex President.

LOUISIANA BOARD OF PHARMACY.

3.—T. J. LABBE of St. Martinsville, President.

2.—WALTER T. TAYLOR, of New Orleans, Secretary.

by a supplementary report from the committee on the president's address recommending that \$50 be appropriated toward defraying the expenses of the legislative committee, which recommendation was approved of.

On motion of A. K. Finlay \$30 was appropriated for prizes for the two best papers submitted to the association.

In the election of officers the following were chosen by acclamation:

President, Dr. John Gazzo; first vice-president, N. P. Roux; second vice-president, E. Goodwill; recording secretary, Mrs. E. Rudolf; corresponding secretary, J. A. Legendre; treasurer, E. Lalmant; executive committee: G. W. McDuff, George Brown, W. M. Levy, Dr. E. U. Bourg and C. L. Keppler. Mrs. Rudolf and Messrs. Lalmant and Legendre were re-elected.

### New Jersey Association.

The twenty-fourth annual meeting of the New Jersey Pharmaceutical Association will be held in Hotel Brunswick, Asbury Park, May 23 and 24. The secretary announces that the president desires to meet the officers and committees Thursday evening, May 22, the evening previous to the opening of the session, to arrange reports and prepare for the business of the following day. The local committee under the management of Geo. E. Williams have prepared an entertaining programme and will issue their own invitations in a few days. The official arrangements for the two days' sessions are as follows:

## FIRST DAY.

## OPENING SESSION AT 10 A.M.

Address of Welcome.  
Address of the President.  
Appointment of Committee on Pres. Address.  
Report of the Secretary.  
Report of the Treasurer.  
Report of Delegates.  
Communications.

## AFTERNOON SESSION AT 2 P.M.

Appointment of Nominating Committee.  
Appointment of Committee on Place of Meeting.  
Report of Board of Pharmacy.  
Report of Legislative Committee.  
Report of Trade Interest Committee.  
Report of Membership Committee.  
Report of Query Committee.  
Reading of Papers.  
Discussion of Papers.  
Miscellaneous Business.

## SECOND DAY.

## MORNING SESSION AT 9 A.M.

Report of Committee on Place of Meeting.  
Appointment of Local Committee.  
Report of Committee on President's Address.  
Appointment of Delegates.  
Unfinished Business.  
Report of Executive Committee.  
Report of Nominating Committee.  
Election of Officers.

**ERIE COUNTY ASSOCIATION.**—The Erie County Pharmaceutical Association and the Alumni Association of the Buffalo College of Pharmacy held a banquet at the Niagara Hotel in Buffalo on May 2. Over 125 persons were present as guests.

A. C. Anthony, president of the Erie County Association, and William B. Reed, president of the Alumni Association, were toastmasters. The toasts were as follows:

"Druggists' Opportunities," the Rev. Thomas R. Slicer; "The Municipality," John W. Fisher; "The Druggists up to Date," Dr. W. H. Heath; "The Druggists' Sway," Ald. R. K. Smither; "The Faculty," Dr. Ernest Wende; "The New York State Pharmaceutical Association," Dr. Willis G. Gregory; "Legal Therapeutics," John Cunneen; "Class of 1894," Dr. A. J. Drake; "The Retail Druggist and his Jobber," Albert Wamsley.

The banquet was an unqualified success. This was largely due to the fact that Plin S. McArthur, C. N. Riggs and James L. Perkins formed the committee of arrangements.

**DELAWARE ASSOCIATION.**—The annual meeting of the Delaware State Pharmaceutical Society was held May 3.

The following officers were elected for the ensuing year: President, Beatom Smith, Wilmington; vice-presidents, J. B. Butler, Newark, C. D. Sypherd, Dover, and T. A. Shipley, Seaford; secretary, F. W. Fenn, Wilmington; treasurer, James M. Griffin, Wilmington; executive committee, William Poole, D. M. White and T. B. Cartmell.

**GEORGIA BOARD OF PHARMACY.**—The Georgia Board of Pharmacy met in the Windsor Hotel, Americus, May 7th, and examined fifteen applicants. Ten passed and five failed. The successful candidates were: Henry Gann, Ph.G., Columbus; R. W. Mitchell, Ph.G., Savannah; E. A. Gregory, M.D., Atlanta, who made pharmacists, license, E. B. Smith, Columbus, apothecary, and J. A. Adams, Waycross, E. M. Baker, Savannah; H. W. Doster, Rocky Ford; W. O. Elkin, Atlanta; Ed. P. Halley, Butler; H. A. Munro, M.D., Ellaville, as druggists. At the night session Dr. J. Now. Goodwyn resigned the chairmanship of the board, an office he has honorably filled for the past four years. Mr. S. C. Durban, of Augusta, was unanimously elected chairman. Messrs. T. P. Marshall, Ph.G., and Jas. McMullen were examined on the 8th and passed as druggists. The Sprague medal was awarded to Mr. Roger Boyd,

Dr. Henry R. Slack, who has served as secretary of the board for the past seven years, was unanimously endorsed by the Georgia Pharmaceutical Association for reappointment by the Governor. The next meeting of the board will be held at Atlanta on Nov. 12.

## Boston.

J. V. Olander, Worcester, has assigned; liabilities, \$1,000.

E. J. Condra, the Quincy druggist, has sold out to Greening & Hialop.

Henry M. Linbury, druggist at Pontiac, has sold out to Weed & Co.

F. A. Barker, Gloucester, has a new marble fountain manufactured by James W. Tufts & Co.

Bates & Kirby of New Bedford are recent purchasers of a large fountain from J. W. Tufts & Co.

Defective electric wires were the cause of the fire in George C. Goodwin's store. It was a \$50 blaze only.

A naphtha explosion was the cause of a slight fire in H. Cobley's store, 45 Hancock street, Dorchester.

A new store has been opened at Peabody by J. J. Carroll & Co. The furnishings include a Low Art Tile fountain.

W. R. Proctor, Sandwich, is refitting his establishment, and among the additions is a Low Art Tile fountain.

Arthur Tessier is moving his store to Harrison avenue corner of Harvard street. He will have a Low Art Tile fountain.

Cutler Bros.' delivery team was recently robbed of a box containing \$18 worth of goods; the thief was caught redhanded.

A. Lawrence Smith and A. Mayhew will shortly start a drug store at Ann Arbor, occupying half of Barnum & Showerman's jewelry store.

The State board of health examined 88 samples of drugs during March and found 16 of this number to vary from the legal standard. The adulterated samples were chloroform, powdered opium and tincture of opium.

Milford druggists held a private meeting recently to secure, if possible, a uniform schedule of low prices for patent medicines and drugs. This is due to the action of one druggist in cutting prices on a few specialties.

Edward E. Babb, Ph.G., for many years in charge of the laboratory of Joseph T. Brown & Co., has recently entered the employ of the Doliber-Goodale Co., where he will be at the head of the analytical laboratory which this firm is about completing.

Two overcoats and a pair of trousers are missing from B. F. Stacey's store, Thompson square. It happened in this manner: while the two clerks were busy waiting on customers, a sneak thief gained an entrance through a rear window, with the result already stated.

At the last examination of the board of pharmacy certificates were granted to Arthur H. Taylor of Lynn, James E. Fitzgerald of Lynn and Leon E. Leavitt and Taylor L. Mills of Boston. The latter is one of the successful students in your "Quiz Box" contest.

Mead, Boyden & Co., druggists' sundries, formerly of 176 Devonshire street, have filed a composition offer of 12½ per cent. Their schedules show debts amounting to \$13,765. The assets consist of stock of goods at 102 Pearl street, and mirror plates at 176 Devonshire street,

Ambrose L. Adams, said to be the oldest druggist in East Boston, died suddenly at his residence, 297 Meridian street, on April 29. He was born at Grafton, Vt., and was for many years a resident of Ludlow, Vt. A widow, one son and two daughters survive him. The funeral occurred on the following Wednesday and was largely attended. The interment was in Cambridge cemetery.

The druggists of Allston, Brighton and Brookline were organized last Tuesday, May 8, into one association. They are all united and this makes one more link in the long chain. They have signed the constitution and by-laws, paid in their money and elected officers as follows: F. W. Moore, Allston, president; E. T. C. Eddy, Brookline, vice-president; F. H. Howe, Allston, secretary; A. L. Gardner, Brighton, treasurer. Directors: A. J. Hayman, G. W. Warren, J. E. Brown, A. W. Bowker, L. Hickey.

Instructor Benedict entertained the junior class in chemistry at his residence a few nights ago. The evening was not given over wholly to pleasure for Mr. Benedict very carefully reviewed the work of the year in anticipation of the then approaching examination. A collation was served, and the boys before retiring returned a unanimous vote of thanks. Mr. Benedict is deservedly popular with his class, which regrets that he is to sever his connection with the school at the close of the present term, as he has planned to do in order to go abroad for the purpose of study.

Alfred S. Rosenfield, on behalf of the Western Chemical Co., has commenced suit at Detroit to secure an accounting from the Seeley Mfg. Co. J. E. Smith is the proprietor of the latter firm. Both are partners. Mr. Rosenfield claims that as the two firms were engaged in practically the same line of business—essential oils, perfumes, etc.—orders for certain designated lines of manufactured goods were to be given to each, so that there might be no conflict or rivalry. He alleges that his partner in the Seeley Mfg. Co. has not lived up to the agreement and asks the court for an accounting.

The Apothecaries' Guild of Boston and vicinity met Thursday, May 3, and the following resolutions were adopted:

The Apothecaries' Guild of Boston, in common with kindred associations, laments the death of Theodore Metcalf, the nestor of the pharmaceutical fraternity in New England.

Mr. Metcalf came to our city in his early manhood, and at once became known to the community as a genial, kind and courteous gentleman, and these qualities being happily commingled with rare ability as a pharmacist, soon caused his model establishment to become celebrated throughout the country.

Mr. Metcalf has left us an example worthy of emulation. His unvarying kindness when called upon for advice and counsel, will ever be remembered by the fraternity in which he labored. His treatment of the hundreds of young men who have had the good fortune to have been in his employ during his sixty years of business life, was that of a painstaking preceptor, to follow whom in their after years was to spread the high standard inculcated by this ideal apothecary.

Unostentatious and modest in his good works as a business man, as a citizen, as a generous dispenser of charity, and more than all, as a true Christian gentleman, we shall ever cherish his memory, and feel that the world in which we move was made brighter because he lived in it.

"God's finger touched him and he slept."  
To his bereaved family we tender our sincere sympathy.

It is said that Andrew H. Ward will be fortunate if he retains his present position as examiner of drugs, for there is indignation at the treasury department over his attempted interference with the appraiser's office. The trouble is caused by some charges made by Mr. Ward, which the department at Washington considers too trivial to notice officially, and Mr.

Ward has not endeared himself to the authorities by persistently talking about this matter. If he continues he is likely to be reprimanded if not removed. The report of the committee on liquor law that the bill prescribing the fee for sixth-class license ought not to pass came up for discussion in the House recently. One of the speakers opposed the report, and moved to amend by the substitution of the bill raising the fee for sixth-class license from \$1 to not less than \$50 nor more than \$500. The speaker insisted that the bill was a good one. In his own city druggists with a sixth-class license boldly engaged in the liquor business. This they did when no license prevailed. With license, however, they gave up the drug business and ran saloons instead. By the vote which followed the substitute was defeated and the committee's report sustained by a large majority.

### Dinner in Honor of S. W. Fairchild

A number of the officers and members of the College of Pharmacy of the City of New York gave a dinner in the "Red room" of Delmonico's, in honor of Samuel W. Fairchild, President of the College, on Thursday evening May 10.

William M. Massey, chairman of the committee of arrangements, presided, and, after dinner was disposed of, addressed the gathering. He made reference in the course of a few well-chosen remarks to the occasion which had brought about the meeting and read several letters of regret from members who were unavoidably detained elsewhere. He then called upon Thomas F. Main to propose the toast of the evening.

In offering the toast "Samuel W. Fairchild—The President of Our College—Our Honored Guest," Mr. Main made many felicitous references to the zeal and energy displayed by Mr. Fairchild in the up-building of the College.

Mr. Fairchild responded in a few appropriate words expressing his appreciation of the honor conferred. Wm. M. Massey, who acted as toast master, then called upon Dr. Chas. Rice, who spoke of the early history of the New York College of Pharmacy and the eminent services rendered to the college in later years by Mr. Fairchild. He paid a well deserved tribute to Mr. Fairchild's administrative ability and his capacity for work, and expressed the hope that the college would be long favored with the benefits of Mr. Fairchild's ripe business experience and familiarity with college work. Hermon W. Atwood followed with a few well chosen remarks in eulogy of the guest of the evening. Alfred Hy. Mason was then called upon. He spoke of his first introduction to the college, when the lectures were given in the University Building. Here, through the kindness of his lamented friend, Prof. P. W. Bedford, he made the acquaintance of the college faculty. He had watched with interest the progress of pharmaceutical education in this country and was convinced that "our friends in Bloomsbury Square would have to look to their laurels in keeping pace with the progress of the day." H. N. Fraser gave some amusing personal reminiscences of the early days of the college.

He referred to the lack of ventilation which was so noticeable a feature of the lecture rooms in the old University Building and told of the soporific effects which the air of the old building exerted on the students. This, he said, was due to the lack of fresh air, the atmosphere of the

room being almost poisonous with carbonic acid. He was in attendance one day during a lecture by Professor Chandler when nearly every one, including the lecturer, began to show signs of sleepiness. Professor Chandler was determined to secure both attention from the students and healthful air, and Mr. Fraser told with fine zest of how he succeeded at the expense of a choice lot of mineralogical specimens and several costly panes of glass.

The invitation requesting the honor of Mr. Fairchild's presence at dinner was signed by 23 names, and was worded as follows:

SAMUEL W. FAIRCHILD, Esq.

DEAR SIR: As officers and members of the College of Pharmacy of the City of New York we desire to show our appreciation of your devotion to the interests of the college and of your uniform courtesy to those with whom you have been associated in conducting its affairs, by inviting you to meet us at a dinner to be given in your honor at Delmonico's on Thursday evening, May 10, at seven o'clock, if the date and hour suit your convenience.

The invitation concluded with the usual complimentary subscription, and was signed by the officers and members named, as follows: George Massey, vice-president; John R. Caswell, vice-president; Horatio N. Fraser, treasurer; J. Niven Hegeman, secretary; Hermon W. Atwood, Charles Rice, Thos. J. Macmahon, William M. Massey, Thos. F. Main, Alfred Hy. Mason, Benjamin T. Fairchild, George W. Kemp, John McKesson, Domingo Peraza, John M. Peters, Chas. Holtzhauer, Samuel W. Browne, Samuel J. Bendiner, Clarence O. Bigelow, Theodore Louis, Reuben R. Smith, Henry Schmid, Adolphe Tscheppe.

### News Notes.

Ed. Heith, of Rahway, sold his pharmacy last week to A. A. Kirschstein.

R. Heine has accepted a position at Koellner's pharmacy, 445 Second avenue.

J. D. Morrison has succeeded Dr. Ottiwell as New York representative of the *New England Druggist*.

H. G. Born, class of '94, is in charge of the prescription department of Bongartz's pharmacy, Ninth avenue and 58th street.

H. M. O'Neil, formerly at 468 Hudson street, this city has bought out the Crescent Drug Company on Market street, Newark.

J. W. Riehl, who has for years conducted a successful pharmacy in Astoria, L. I., will open a branch store in the same place on or about June 1st.

W. L. Schaff has purchased the store of Barry & James at 798 Eighth avenue. Failing health has caused Mr. James to retire from the drug business.

Dr. Robert F. Weir performed at the New York Hospital of this city the rather unusual operation of removing a kidney recently with the most favorable results.

Chas. Miller, class of '94, N. Y. C. P., is about to open a drug store at Fleischman, N. Y. This is a pretty villa resort where Mr. Miller may anticipate a pleasant sojourn.

The Lexington avenue pharmacy at Lexington avenue and Thirty-first street has been bought by J. Kiernan, who has moved to Franklin and Lexington avenues Brooklyn.

W. E. Dreyfuss and C. O. Hildebrandt have joined forces, incorporating their two stores in Hoboken under the new

Dreyfuss & Hildebrandt Drug Co. They will open a new store in addition to the two now controlled.

L. Glaeser, an old time druggist of Jersey City Heights, who sold out his pharmacy some years ago, has opened a new pharmacy on Bergen Line avenue, Union Hill, N. J., and expects to build up a fine trade with all the enthusiasm and sanguineness of youth.

### Imitators of Pinaud's Goods in Court.

M. Emil Utard has just returned from a three weeks sojourn on the Pacific Coast where he was called to investigate charges of fraudulent imitation of Pinaud's goods against a number of retail dealers in that city.

Whereas, in nearly every other section of the United States, the sale of these goods had been rapidly increasing there has been a decline of their sale on the Pacific coast and upon investigating Mr. Utard found this to be due not to a declined popularity of the goods, but to wholesale substitution. During the three weeks he was there he obtained undisputed evidence of willful substitution by some forty dealers among whom were five manufacturers who had been selling in an open way fraudulent imitations of Pinaud's cosmetic preparations, the bulk of sales having been of *Eau de Quinine Tonique*, *Brillantine* and *Cosmetique Ficeur*.

In the hands of one manufacturer of these spurious goods 50,000 cosmetic labels were seized. These labels were in close imitation of the genuine, though there were some slight differences in typography which showed only on careful inspection. While much of the imitation preparations was refilled into bottles from which the genuine articles had been used some of the manufacturers had even gone so far as to have bottles made with the name of E. Pinaud, Paris, molded in the bottle itself. Mr. Utard has directed Chickering, Thomas & Gregory, his San Francisco attorneys, to bring suit against these dealers, and he informs us these suits will be pushed to the full limit of the law.

The great and increasing popularity of the Parfumerie Ed. Pinaud has brought out many imitations, and in New York City itself Mr. Utard has found it necessary to take legal proceedings against a manufacturer of imitations of his goods. A few cases of the manufacture and sale of these goods have been unearthed in several Western cities, and in each of these cases Mr. Utard states that he will proceed against the offender with the utmost vigor. Great care should be therefore exercised in the purchase of all Pinaud's perfumeries by the dealer, for even if the retailer is not aware of the fact that he is handling the imitations he might be put to very serious inconvenience and expense should he be detected in the sale of any imitation goods. In the case now in the courts of San Francisco Mr. Utard states that the dealers were fully aware that they were handling spurious goods, and he will therefore prosecute them to the full extent of the law.

In England manufacturing pharmacists have adopted a new and popular method of advertising their specialties. This is the issuing of popular novels in penny form. "The Vicar of Wakefield" is the first in the series. Space is reserved for the retailer's name and advertisement.

## Trade Notes.

Every druggist who wishes to secure a reputation for keeping fine perfumery will do well to procure a price list of the Crown Perfumery Co.'s fine perfumery. A list of the latest novelties of the firm is advertised in this issue and additional particulars can be had by addressing the Crown Perfumery Company at 160 Fifth avenue.

Arthur W. Hahn, dealer in druggists' glassware and sundries, 61 Park Place, is introducing new salable goods for druggists. These are Wesley's nursing bottle brushes, articles of great utility where children are fed by bottle. He offers to send one lot of six samples to any druggist on receipt of 60 cents. Address Arthur W. Hahn, 61 Park Place, New York.

Those who have experienced the difficulties which attend the manufacture of a really first-class tooth powder will not be slow to take advantage of the offer made in this issue by the old-established house of Henry C. Blair, 800 Walnut street, Philadelphia. Sample lots of "No. 29 Tooth Powder" of different tints and flavors can be had for the mere asking. This is supplied in bulk in 5 lb. cans and so cheaply that druggists will require little persuasion to buy. Send for a sample to the address given above.

The W. I. Follett Mfg. Company, 95 Nassau street, New York city, have made a "special hard times price" on the Shaw Numbering Machine. A numbering machine is a well high indispensable requisite of the prescription counter. Numbering machines prevent such accidents as arise from placing one number on the prescription and another (and a difficult one) on the label. Numbering machines never go astray, talk, get thoughtless, but always attend to business. You will serve your interests by procuring a "Shaw." Write to the W. I. Follett Mfg. Co. for descriptive circulars.

The headline to the advertisement of Henry Troemner, which appears in this issue, emphasizes his claims to the consideration of pharmacists in ordering balances and scales of precision. Professor Bedford once said that if every balance now on a prescription counter that was worn out, worthless, inaccurate or untrustworthy were thrown away, as they should be, there would be a demand for fully 10,000 new prescription balances in the United States. The same observation holds good to-day. Pharmacists will observe economy if nothing else in looking after the condition of their scales. Delay no longer about procuring a catalogue of the scales and weights made by Henry Troemner. Send a postal card with your address on it to Henry Troemner, 710 Market street, Philadelphia.

The Kops Company, 406 West 53d street, New York City, are introducing a new non-intoxicating substitute for ale or beer. It comes in two forms, "Kops Cheer" and "Kops Extra," and both have been highly spoken of by many eminent advocates of temperance. The company states that the new beverages are made with the Fulham pure artesian well water, to which is added the finest hops and other most wholesome ingredients, thus producing drinks that are unequalled as thirst quenchers, appetizers, nerve tonics and excellent cures for indigestion.

The Kops Company is prepared to guarantee right to sell without license or in prohibition towns and are desirous to

hear from druggists who wish to handle the new beverage. Communications may be addressed to the Kops Co., at 406 West 53d street, New York City.

## International Congress Awards

In the report on awards made by the jury appointed at the Eleventh International Medical Congress in Rome we notice that Messrs. Oppenheimer, Son & Co. (Limited) of London have been awarded the gold medal, the highest gift in the power of the jury to confer, for the quality, general excellence, and originality of their pharmaceutical preparations, and for the purity and hitherto unobtainable high proteid digestive power of Pepsinum-Oppenheimer (which, it might be mentioned, is manufactured under the Webber patents). The members of the jury, which was constituted of the following well known professors, Paterno, Rome (president); Dacomo, Modena; Peratonera, Catania; Haus Binz, Bonn, and Professor Monardi, the president of the government chemical laboratory in Rome, were unanimous in their praise of the exhibit made by this firm.

Professor Monardi was especially interested in the range of pepsins exhibited by Messrs. Oppenheimer, a compliment shared by J. Le Roy Webber, the originator of the process. When the keen competition and rivalry which existed between the first houses of pharmaceutical manipulation represented at this congress is considered the success of Messrs. Oppenheimer is all the more noticeable and reflects great credit upon the head of the house, William Oppenheimer, and the general manager, Robert R. Martin. It is with this company that H. Baskerville Mason, son of Secretary Mason of Seabury & Johnson, is associated as special representative.

## Soda Fountain Flavors.

Lehn & Fink have added a new flavor to their line of "Concentrated fruit juices": Wild cherry juice, designed especially for dispensing "Cherry Phosphate" at the soda fountain. Directions: Mix cold, 1 part wild cherry juice, 8 parts simple (or rock candy) syrup, and 1 part acid phosphate; dispense a liberal amount with soda water, and the result will be a delicious "special flavor" beverage. A judicious addition of "L. & F. soda foam" to the syrup made with any fruit syrup will greatly enhance the flavor and appearance of the dispensed beverages.

Lehn & Fink's Dutch Cocoa has been in the market several years, and without advertising has found favor and increasing large sales. It is powdered and soluble; for use in syrup at the soda fountain, and likewise for home use as a "breakfast cocoa." It is an absolutely pure powdered cocoa, free from cocoa butter, and containing no sugar, flour, starch or other foreign ingredients. Manufactured especially for, and imported from Holland solely by Lehn & Fink. One teaspoonful will make a delicious cup of chocolate; one-half pound will make a gallon of soda water syrup, yielding an unsurpassingly rich and delicious beverage with soda water. Put up in 5 pound cans, at 50 cents per pound. No matter what sort of cocoa or chocolate you have been using heretofore, try a can of L. & F. Dutch Cocoa: satisfaction is guaranteed. And you'll introduce it in your household, too, without fail.

## Review of the Wholesale Market.

NEW YORK, May 16, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There continues in the market for drugs dyestuffs and chemicals a continued absence of important demand and the market is tame and featureless. The evident disposition of the moment is to restrict all memorandums to jobbing quantities only and most buyers are placing orders in accordance with this. The continued neglect of quantities does not, however contribute to lower values, and prices are fairly well sustained upon most lines with few changes of interest noticed. Opium is lower and continues dull and unsettled. Messina essences are lower. Norwegian cod liver oil is slightly easier. Quinine is without quotable change. Menthol is firmer.

### ADVANCED.

Gum kino.  
Mexican sarsaparilla.  
Coriander seed.  
Angostura tonka beans.  
Acetate of soda.

### DECLINED.

Oil of bergamot.  
Oil of lemon.  
Oil of orange.  
Scale salts of iron.  
Oxalic acid.

ALCOHOL is maintained steadily by the Trus: managers at \$2.18 @ \$2.22, with the usual rebate; there is yet considerable competition from outside sources. Independent producers in Boston and New York offering quantity lots down to \$2.04.

BALSAM COPAIBA continues to find a satisfactory outlet into channels of consumption and values are well sustained from the hands of jobbers. Numerous small sales are reported within the range of 33 @ 38c. for Central American.

BALSAM PERU is maintained firmly at \$1.85 with some in the trade asking even higher, \$2 being quoted in instances as an inside figure; stock is scarce; importers decline to shade \$1.85.

BARKS have shown no special variation during the past week. Cascara Sagrada continues in fair, moderate demand at former prices.

CACAO BUTTER has continued to meet with about the usual attention and among the sales reported are 2,000 lbs. at 32¼c.

COD LIVER OIL remains quiet and prices do not vary from the former range. Reports from primary sources are not encouraging to those of the trade who anticipate a lower range of values, and it is deemed unlikely by many that the prices will go lower.

CUTTLE BONE does not improve in demand and values are a little unsettled; 9½ @ 10c. is yet asked for broken packages, though this price could probably be shaded on a firm bid for quantities.

ERGOT continues neglected and the reported firmness abroad does not seem to find reflection in this market. German held at 22 @ 24c. and Spanish 25 @ 27c.

GUARANA in first hands is held at 90c.; jobbers quote \$1.

LYCOPodium continues in moderate demand. The near approach of the fire-works season together with the small available supply serve to maintain prices and 54 @ 58c. is quoted according to brand.

MENTHOL is firmer in this market as the result of cabled reports from the London market advising an improvement in value. Sales have been made here at \$4.60 @ \$4.65, but an advance upon these figures is generally asked.

OPIUM continues neglected and the market is in a dull and unsettled condition. As predicted in last week's issue values



have taken a lower range and the tendency of the market is of an easier character. The uncertainty which exists regarding the probability of a reconsideration by the Senate of the proposed duty of \$1 per lb. is sufficiently in favor of holders to prevent any startling break in prices. It is the belief of many that a duty will yet be imposed, and in consequence no special effort has been made to urge sales at a concession from the prevailing values. Some few holders are willing to part with cases at \$2.20, but important demand is yet lacking. Jobbing parcels may be had at \$2.25. Powdered continues in moderate demand with sales at \$3.15 @ \$3.40.

QUININE continues in firm position. The market has a strong tone and values are well sustained. Foreign brands are offering at 23 @ 23½c., regular terms, but it is thought the inside figure could be shaded upon a firm cash bid for quantities.

SAFFRON, Valencia, is taken freely at the quotation of holders. We hear of some sales at \$5.25 and \$5.40 @ \$5.60 seems to represent the market.

TONKA BEANS, Angostura, have attracted some attention during the week and continue in good demand with \$2 quoted as strictly inside for prime quality; the small available supply closely concentrated and business in consequence is restricted.

VANILLA BEANS continue in good demand and firm at \$6.50 @ \$13 for whole Mexican and \$5.25 @ \$6 for cut.

#### DYESTUFFS.

CUTCH is in steady, moderate demand, with 5¼ @ 6c. asked for small parcels, prime quality, in bales.

DIVI DIVI remains quiet, with, however, no offers to sell below \$55.

GAMBIR is easier in face of the absence of important demand; for store goods 4 @ 4½c. is asked according to kind and size of parcel required. Stock in transit from London can be purchased down to 3½c.

NUTGALLS have not varied in the interval either as regards price or demand. We quote the range at 13 @ 13½c. for China and 13½ @ 14c. for Aleppo.

SUMAC, Sicily, is jobbing fairly within the range of \$72.50 @ \$77.50.

#### CHEMICALS.

ACETATE OF LIME continues in moderate inquiry, with sales of brown at 90 @ 95c., and gray at \$1.60 @ \$1.65.

ACETATE OF SODA has advanced, owing to scarcity, white being now almost entirely out of market. For brown the price has been advanced to 5c.

ALUM remains quiet but steady at \$1.75 for lump and \$1.80 @ \$1.85 for ground.

BLEACHING POWDER does not appear to be meeting with any special inquiry; English in casks is quoted \$2.25 @ \$2.50.

BLUE VITRIOL is in demand and scarce, with 3¼ @ 4c. the range.

CITRIC ACID is very quiet, and the market is tame and featureless; kegs are held at 42c.

CHLORATE OF POTASH is not inquired for to any extent, but prices are well maintained at the previous range of say 13½c. for German crystals, and 13½c. for English.

CREAM OF TARTAR is quiet but steady at the former range.

NITRATE OF SODA is maintained at \$2.32½ @ \$2.37½, with a satisfactory inquiry at these quotations.

OXALIC ACID is easier and is offering much below the import cost, 6¼ being quoted as acceptable.

QUICKSILVER continues in steady fair inquiry, with the current sales at 49 @ 50c. SAL AMMONIAC, white grain, is firmer with 6¼ @ 7c. generally required.

SCALE SALTS OF IRON (citrate) have been reduced 2 cents per lb. by manufacturers.

#### ESSENTIAL OILS.

ANISE is firm at \$1.50 with a fair inquiry for jobbing parcels.

BERGAMOT, Sanderson's, is lower with the outside range at \$2.15.

CASSIA remains quiet but the quotations of the market do not vary from 82½ @ 85c.

CLOVE is jobbing moderately at the range of 52½ @ 55c.

CUBEB meets with very little attention, the range of the market as to quality is \$1.45 @ \$1.50.

LEMON, Sanderson's, is lower with Bergamot and orange, but the demand has not been appreciably stimulated. Lemon is quoted \$1.35 and Orange \$1.40.

PEPPERMINT has been in good request for export, and HGH is quoted firm at \$3; bulk does not vary from the former range.

#### GUMS.

ASAFETIDA continues in fair steady inquiry; among the sales we are reported 1,000 lbs. of prime quality at 25c.

CAMPOR is taken with freedom by the trade and requirements are being met at the range of 38 @ 41c. as to quantity and the style of package.

CHICLE is less actively inquired for, but the market is firm at 26c. up.

KINO is scarce and the small available supply is closely concentrated; the price has been advanced to \$1.20 and the tendency is yet regarded as upward. We hear of numerous sales at the figure quoted.

SHELLAC is neglected momentarily though the market retains its generally steady appearance with the future prospects regarded as bright. DC is quoted 34 @ 35c, VSO 33c, SS 30 and TN 25 @ 26c.

TRAGACANTH is being taken with considerable freedom by the trade at prices fairly within the range of 28 @ 56c. as to quality.

#### ROOTS.

ACONITE, German upon spot, continues held at the inside figure of 12c.

CALAMUS, bleached, remains quiet but firm at 22 @ 24c.

COLOMBO is realizing 5¼ @ 10c. and a moderate jobbing distribution is reported at this range.

GINSENG does not vary from 3¼ @ 4c. and numerous small sales are reported at this range.

HELLEBORE, white whole, is held at 4¼ @ 5c.; some 8,000 lbs. have changed hands during the week on private terms; pure powdered is offering at 7½c.

JALAP continues dull though prices are steady at 20c. for prime goods.

SARSAPARILLA, Mexican, is scarce and maintained firmly at 8¼ @ 9c. Among recent transactions we note sales of 10 bales at the inside figure.

SENEGA is maintained in strong position with best grades, Manitoba, held at 38½c.

SNAKE, Texas, is easier with sellers now at 30c.

VALERIAN is jobbing at 10 @ 12c. for German.

#### SEEDS.

ANISE, Italian sifted, is well sustained at 8¼ @ 10c. for new, and a moderate jobbing business is reported.

CANARY continues very quiet with 23¼c. quoted for Smyrna and 2¼ @ 3c. for Sicily.

CARAWAY, Dutch, is quiet but steady at 6¼ @ 6½c.

CELERY is held at the range of 17½ @ 19c. though no important sales are making.

CORIANDER continues selling in small lots at full 8c., which price is steadily maintained.

MUSTARD is firm and steady at 4c. for yellow California; brown is held at 3½ @ 3¾c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

AGENTS WANTED calling on drug trade to sell my goods from catalogue, as a side line. F. N. Burt, manufacturer druggists' boxes and labels, Buffalo, N. Y.—23.

DRUG CLERK, graduate or licensed, in Connecticut, will hear of a good position by addressing "Johnson," care of this office.

TRAVELING men wanted to handle a paying side line on commission; something that is going to be popular and prove a rapid seller. Address "H. G.," care of this office.

JUNIOR CLERK with three or four years experience wanted for Brooklyn. Excellent opportunity for a lad of studious habits. Address "Creosote," care of this office.

#### POSITIONS WANTED.

SITUATION AS ASSISTANT wanted by graduate of Ontario College of Pharmacy; Phm. B. of University of Toronto; will go anywhere and accept moderate salary. Address F. W., in care of Dunscomb & Frith, 40 Exchange Place, New York.—20.

SITUATION WANTED by a reliable and competent pharmacist; registered in New York State; eight years' practical experience with the retail trade; strictly temperate and can furnish best of references. Address "Migraine," care of this office.—22.

SITUATION WANTED by an experienced German pharmacist, registered in several States, and can register in any other one; good references. Address "Ph.," care of this office.—20.

SITUATION WANTED.—An A1 man wants situation for the summer at seaside or mountain resort; will take charge; 12 years in retail. Address M. L. Trowbridge, 1500 W. Genesee street, Syracuse, N. Y.—20.

SITUATION WANTED by experienced druggist having extensive knowledge of wholesale and retail branches; would like position in manufacturing pharmacy or laboratory; skilled in manufacture of solid and fluid extracts and preparations of National Formulary; can do analytical work; excellent references. Address "Phenolphthalein," Versailles, Conn.—19.

WANTED.—Position as drug clerk in New York or vicinity, by graduate N. Y. C. P.; good references; moral character. Address "Sulfural," 176 Parke avenue, Mt. Vernon, N. Y.—20.

RELIEF.—Probably you cannot afford a regular clerk, but you can a relief for an evening or two a week; write me and I will call; no estimates sent; if not already booked can connect at short notice; will oblige any evening, but regular dates are preferred; hours: from 7 p.m. Jas. M. MacDonald, 659 Degraw street, Brooklyn.—23.

#### BUSINESS OPPORTUNITIES.

FOR SALE.—Physician's practice and drug store in a thriving town in Montana; physician's practice over \$3,000 a year; drug store stock about \$2,000. Address, "A. T." care of this office.—23.

FOR SALE.—A drug store in a western New York town; good location, fine store; only soda fountain in town; cash trade; a good opportunity for one of moderate means; don't write unless you mean business. Address "County Seat," care of this office.—20.

TO RENT in Northampton, Mass., a corner store, new, never occupied, opposite the Academy of Music and Smith's College; so x 70 feet; just the place for a drug store; 1,300 college girls; population 15,000; price \$700. Address E. W. Higbee (owner) 81 Main street, Northampton, Mass.—21.

FOR SALE.—About \$2,000 will buy the only drug store in a nice town of 1,000, with a surrounding territory of 5 miles north, 5 miles south, 10 miles east and 8 miles west; well stocked; cash trade; reason for selling, have two stores; a rare chance for a cash purchaser. Address "Oxalic Acid," care AMERICAN DRUGGIST.—20.

# ORIGINAL PACKAGE PRICES.

It should be understood that the prices quoted in this column are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a considerable range of prices.

## Drugs, Chemicals, &c.

<p> <b>Acetanilid</b>, bulk, per lb. .35 @ .36                      " lba... per lb. .58 @ .58                      " exs... per oz. .56 @ .56  <b>acetate of lime</b>:                      Brown, per 100 lb. .90 @ .95                      Gray, per lb. .01 @ .01  <b>acids</b>:                      Acetic Com'l, pr lb. .01 @ .02                      aquafortis, 36 deg. .03 @ .03                      " 40 " .03 @ .03                      Benzoic, German. .51 @ .53                      " English. .09 @ .09                      Boracic, Whole. .12 @ .12                      " Powdered. .13 @ .13                      Citric, American. .41 @ .42                      " English. .43 @ .43                      Carbolic Crystals. .13 @ .16                      bulk. .19 @ .21                      lb. bottle. .19 @ .21                      Muratic, 18 deg. .90 @ 1.37                      Nitric, 36 degrees. .03 @ .04                      " 40 " .04 @ .04                      Oxalic, English. .07 @ .07                      " German. .06 @ .06                      Picric. .23 @ .30                      Salicylic. .12 @ .12                      Sulphuric. .28 @ .25                      Tartaric, Crystals. .28 @ .28                      " Powdered. .24 @ .24                      Tannic. .10 @ 1.20                      Alcohol, Grain, per gal. .18 @ .22                      (Less rebate).                      Wood, 95/107. .70 @ .73                      Alcohols:                      Aloin, per lb. .10 @ 1.35                      Alum, Lump, per 100 lb. .10 @ 1.80                      Ground, per 100 lb. .10 @ 1.80                      Antifebrine, per oz. .19 @ .80                      Antipyrine, per oz. 1.80 @ 1.40                      Arrow root, Berm., lb. .41 @ .25                      St. Vincent, in bbl. lb. .21 @ .21  <b>Arsenic</b>:                      Red Saxon, lb. .06 @ .06                      White. .03 @ .03                      Balsam, Copaiba, lb. .33 @ .38                      Fir, Canada, gal. 3.25 @ 3.70                      Fir, Oregon, gal. .70 @ .75                      Peru, lb. 1.85 @ 1.90                      Tolu, lb. .25 @ .27                      Bark, Buckthorn, per lb. .05 @ .08                      Cascara Sagrada, lb. .05 @ .06                      Elm, lb. .10 @ .12                      Orange peel. .06 @ .07                      Sassafras, per lb. .06 @ .07                      Soap, lb. .03 @ .04                      Bicarb. Soda, Engl. lb. .03 @ .03                      domestic, lb. 1.00 @ 1.15                      Bichromate, Pot'h, lb. .10 @ .21                      Bismuth, Sub. Nit., per lb., bulk. 1.95 @ 2.00                      Bismuth, Sub. Carb., per lb., bulk. 2.95 @ 3.30                      Bleach'g Powd., per lb. .08 @ .08                      Blue Vitriol, lb. .03 @ .03                      Borax, refined, lb. .08 @ .08                      Concentrated, lb. .07 @ .07                      Brimstone, best ad, ton 17.85 @ 17.50                      Bromide Potash, Domestic, lb. .37 @ .38                      bottles, lb. .43 @ .46                      Bromide Ammonium, bulk. .45 @ .46                      Bromide Sodium, b'k. .45 @ .43                      Bromine, bulk. .43 @ .45                      Burgundy pitch, per lb. .08 @ .08                      Cacao Butter:                      1-lb. boxes, lb. .38 @ .38                      Dutch A., per lb. .33 @ .34                      Caffeine, .35 @ .35                      Camphor, red'd, bbls., lb. .30 @ .40                      Cantharides, Chinese, lb. .65 @ .66                      Russian, lb. .65 @ .77                      Carb. Ammonia, casals, lb. .08 @ .08                      Cassia Buda, lb. .18 @ .18                      Castor Oil, cases, lb. .15 @ .15                      Barrels, lb. .14 @ .15                      Caustic Soda, as to test 2.50 @ 2.65                      Chalk, Engl. Precip., bulk, lb. .04 @ .06                      Chloral Hydrate Crystals, bulk, per lb. .10 @ 1.25                      Hydrate crusts, bulk, per lb. .10 @ 1.80                      Chlorate Pot. Cryst., lb. .13 @ .14                      P.w'd, lb. .14 @ .14                      Chloroform, Bulk, lb. .50 @ .55                      Chloroform, Sulphate of, German, oz. .08 @ .08                      Citrates, U.S.P. Iron, lb. .50 @ .50                      Soluble. .55 @ .55                      Iron and Ammonia, lb. .50 @ .50                      Iron and quinine. 1.90 @ 1.55                      Iron and strychnine. 2.00 @ 2.05                      Phosphate, U.S.P. lb. .57 @ .57                      Pyrophos. U.S.P. lb. .58 @ .58                      Pyrophos. Soluble, lb. .58 @ .58                 </p>	<p>                     Citrates, Potash, per lb. .40 @ .40                      Soda, per lb. .40 @ .40                      Cobalt, pow'd, lb. .28 @ .28                      Cocaine Murate, per oz. 5.95 @ 6.15                      Codeine bulk, oz. 4.00 @ 4.40                      Codeine, eight. 4.65 @ .                      Cod Liver Oil, Norwegian, bbls. 26.50 @ 29.00                      Newfoundland. .25 @ .65                      Colocynth:                      Trieste, lb. .33 @ .36                      Spanish. .19 @ .24                      Copperas, per 100 lb. .70 @ .85                      Cr. Tartar, Crystals, lb. .17 @ .18                      Cubeb Berries, XX, lb. .16 @ .20                      Ordinary, lb. .14 @ .13                      Cutch, bales, SM, lb. .05 @ .09                      Cutch, boxes lb. .08 @ .09                      Cattle bone, Trieste, lb. .09 @ .09                      Jewelers' lb. .35 @ .35                      Dextrine. .04 @ .05                      Divi Divi, per ton. 55.00 @ 65.00                      Dragon's B'd, lump, lb. .10 @ .65                      In recds, lb. .47 @ .65                      Epsom Salts, per 100 lb. 1.00 @ 1.10  <b>Ergot</b>:                      G'm'n and Russ'n, lb. .22 @ .24                      Spanish, lb. .25 @ .27                      Ergotine, Domestic. .40 @ .40                      German. .40 @ .40  <b>Flowers</b>:                      Arnica Flowers, per lb. .11 @ .12                      Chamomile:                      German, New, lb. .17 @ .24                      Roman, New. .15 @ .18                      Lavender, Ordinary, per lb. .04 @ .08                      Select, per lb. .15 @ .05                      Gambier, lb. .04 @ .05                      Glycerin, bbls, lb. .10 @ .15                      cases, lb. .13 @ .15                      Grains, Paradise, lb. .06 @ .10                      Guarana, lb. .10 @ 1.00  <b>Gums</b>:                      Aloes, Cape, lb. .05 @ .06                      Curacao, lb. .03 @ .03                      Socotrine, lb. .28 @ .30                      Arabic 1st picked. .45 @ .48                      ad. .28 @ .30                      Arabic, sorts. .09 @ .10                      Asafetida, lb. .15 @ .25                      Benzoin, lb. .27 @ .28                      Chicla, lb. .25 @ .40                      Gamboge, lb. .53 @ .54                      Guaiac, lb. .15 @ .20                      Kino, lb. 1.80 @ .                      Mastic, lb. .57 @ .70                      Myrrh, lb. .80 @ .38                      Sandrac, lb. .29 @ .30                      Senegal, picked, lb. .18 @ .45                      sorts, lb. .00 @ .00                      Shellac, DC, lb. .35 @ .36                      VSO, lb. .33 @ .34                      Diam'd I, lb. .30 @ .32                      SS, lb. .30 @ .30                      TN, lb. .25 @ .27                      Garnet. .25 @ .26                      Bleached, lb. .30 @ .31                      Tragacanth, Aleppo, lb. .38 @ .48                      Turkey. .48 @ .75                      Indigo, lb. .45 @ .65                      Insect Flowers. .14 @ .25                      Insect Powder, pure, lb. .16 @ .28                      Iodide Potash, bulk, lb. .75 @ .80                      bot's, lb. .83 @ .88                      Isinglass, Am'r'n, lb. .47 @ .60                      Japan, lb. .35 @ .35                      Juniper Berries, lb. .08 @ .08  <b>Leaves</b>:                      Belladonna, per lb. .09 @ .11                      Buchu, short, lb. .08 @ .09                      long, lb. .25 @ .25                      Coca, prime, lb. .15 @ .37                      Damiana, lb. .18 @ .12                      Hyoscyamus. .09 @ .11                      Jaborandi, lb. .17 @ .20                      Rose, red, lb. .53 @ .54                      Senna Alex nat'l, lb. .18 @ .25                      Senna Tinn'y, lb. .05 @ .15                      Stramonium. .05 @ .08                      Licorice, M. &amp; R., lb. .17 @ .19                      Lupulin, German. .45 @ 1.75                      Lycodium, lb. .54 @ .58                      Manna, large flake, lb. .80 @ .83                      Small flake, lb. .28 @ .30                      Menthol, Japanese. 4.65 @ 4.75  <b>Mercurials</b>:                      Blue Pill, lb. .31 @ .38                      Calomel, lb. .08 @ .08                      Cor. Sublimite, lb. .55 @ .57                      Mercury and Chalk. .20 @ .20                      Ointment, lb. .26 @ .37                      Red Precipitate, lb. .78 @ .78                      White. .83 @ .83                      Morphine, bulk, oz. 2.10 @ 2.40                      Rights, oz. 2.15 @ 2.40                      Moss, Irish, lb. .06 @ .06                      Irish, bleached, lb. .11 @ .13                      Murate Potash, per 100 lb. 1.78 @ 1.82                 </p>	<p>                     Naphthaline, flake, per lb. .03 @ .02                      Naphthaline, Ball, per lb. .03 @ .04                      Nitrate Silver, oz. .48 @ .43                      Nitrate Soda, 100 lb. 2.15 @ .25                      Nux Vomica, lb. .02 @ .03                      Nutgalls, China, per lb. .13 @ .13                      Aleppo, per lb. .13 @ .14  <b>Oils, Essential</b>:                      Anise. .10 @ 1.50                      Almonds, Bitter. .70 @ 1.50                      Sweet. .80 @ .40                      Bay, per lb. 3.50 @ 4.00                      Bergamot. 1.75 @ 2.15                      Cajepot, Native. .35 @ .45                      Camphor. .07 @ .08                      Cassia. .82 @ .85                      Citronella, Native. .24 @ .28                      Clove. .50 @ .53                      Copaiba. .70 @ .80                      Croton. .90 @ 1.00                      Cubeb. 1.45 @ 1.50                      Geranium. 4.00 @ .                      Lavender. .40 @ .25                      Garden. .40 @ .90                      Lemon, as to brand. .05 @ 1.35                      Lemongrass. .80 @ .85                      Musk, per lb. 7.00 @ 8.00                      Myrrane. .17 @ .19                      Neroli. .25 @ 35.00                      Nutmeg. 1.80 @ 2.75                      Orange, sweet. 1.35 @ 1.40                      Orange, bitter. 3.25 @ 4.00                      Origanum. .24 @ .                      Peppermint. .90 @ 1.00                      Peppermint, bulk. 2.30 @ 2.60                      HGH. 2.90 @ 3.00                      Rose. 7.50 @ 9.00                      Sandalwood. .10 @ .85                      Sassafras. .36 @ .38                      Sassafras, Artificial. .25 @ .26                      Spearmint. 1.60 @ 1.80                      Tansy. 2.00 @ 3.00                      Wintergreen. 1.40 @ 1.50                      Artificial. .80 @ .87                      Wormwood. 2.00 @ 2.25  <b>Opium</b>, Natur'l, ca., per lb. 2.20 @ 2.30  <b>Opium</b>, Ordinary, Jobbing, per lb. 2.25 @ 2.35  <b>Opium</b>, Powd., per lb. 3.15 @ 3.40  <b>Phenacetin</b>, per oz. .85 @ 1.00  <b>Prussiate Potash</b>, Yellow, per lb. .24 @ .25  <b>Red</b>, per lb. .48 @ .43  <b>Quicksilver</b>, flasks, per lb. .49 @ .50  <b>Quinine</b>:                      Domestic, bulk, oz. .25 @ .27                      Domestic, oz. .30 @ .35                      German, bulk. .23 @ .24                      German, oz. .27 @ .29                      Rochelle Salts. .24 @ .25                      Roots, Aconite, lb. .10 @ .12                      Althea, cut, lb. .18 @ .20                      Alkanet, lb. .06 @ .07                      Arnica, lb. .12 @ .13                      Belladonna Ger., lb. .09 @ .10                      Blood, lb. .05 @ .06                      Calamus, lb. .26 @ .26                      Calamus, bleac'd, lb. .28 @ .28                      Colchicum, per lb. .14 @ .18                      Colombo, lb. .05 @ .10                      Dandelion, Germ. lb. .07 @ .08                      Dogwood, lb. .08 @ .10                      Galangal, lb. .24 @ .04                      Gentian, lb. .03 @ .04                      Ginseng, lb. 2.00 @ 3.00                      Ginger, Jamaica, bleed., lb. .15 @ .17                      Ginger, Jamaica, unblech., lb. .12 @ .14                      Golden Seal, lb. .21 @ .22                      Hellebore, powd., lb. .07 @ .08                      Ipecac, lb. 1.27 @ 1.40                      Jalap, lb. .20 @ .23                      Kava Kava, lb. .16 @ .18                      Licorice, select, lb. .08 @ .15                      Pt. w'd., lb. .17 @ .25                      Lovage, lb. .30 @ .35                      Mandrake, lb. .03 @ .04                      Orria, Florentine, lb. .20 @ .30                      Orria, Verona. .10 @ .20                      Pink, lb. .28 @ .30                      Rhubarb, lb. .20 @ .75                      Sarsaparilla, Hond. lb. .28 @ .43                      Sarsaparilla, Mex., lb. .08 @ .08                      Senega, lb. .38 @ .40                      Serpentina, lb. .35 @ .36                      Valerian, Belgian, lb. .07 @ .07                      German, lb. .10 @ .12                      Saffron, Amn., lb. .45 @ .48                      Spanish, Valencia, lb. 5.40 @ 5.60                      Spanish, Alicante, lb. 4.50 @ 4.50                      Sal Ammoniac, lump, lb. .06 @ .07                      Do., Granulated, lb. .06 @ .06                      Sal Soda, Eng., 100 lb. .90 @ .95                      American. .80 @ .85                      Saltpeter, crude, per lb. .03 @ .04                      Saltpeter, Refined, per lb. .06 @ .06                 </p>	<p>                     Seeds, Anise, Ital., lb. .08 @ 10                      Seeds, Anise, German lb. .06 @ .08                      Anise, Star, lb. .18 @ .18                      Canary, Smyrna, lb. .03 @ .03                      Canary, Sicily, lb. .03 @ .03                      Caraway, lb. .06 @ .06                      Cardamom. .65 @ .80                      Aleppy, per lb. .65 @ .80                      Cardamon, Malabar, per lb. .70 @ .90                      Celery, lb. .17 @ .19                      Colchicum, lb. .12 @ .13                      Coriander, lb. .07 @ .07                      Cummin, lb. .10 @ .11                      Fennel, Germ., lb. .10 @ .11                      Flax Meal, per lb. .03 @ .03                      Foenugreek, lb. .03 @ .03                      Hemp, Russian, lb. .03 @ .03                      Mustard, yel. Cal. lb. .03 @ .04                      Mustard, brown, Cal. lb. .03 @ .03                      Poppy, per lb. .05 @ .07                      Quince, German, lb. .15 @ .40                      Rape, German, lb. .03 @ .03                      Rape, English, lb. .03 @ .03  <b>Soap</b>, Castile, Mara, mottled, pure, lb. .06 @ .06                      White, Conti's, lb. .09 @ .10                      Soda Ash, lb., 48 per 100 lb. 1.80 @ 1.85                      Squills, white, lb. .04 @ .06                      Sugar Milk, powd., lb. .08 @ .10                      Sugar Lead, white, lb. .12 @ .12                      Lead, brown, lb. .05 @ .06                      Sulphate Ammonia, per 100 lb. 2.90 @ 3.00                      Do. Potash, 48 per lb. 1.21 @ 1.25                      Do., Potash, 96 per lb. 2.20 @ 2.15                      Sulphur, Roll. .01 @ .01                      Flour. .01 @ .01  <b>Spirits Nitre</b>, U. S. P. .39 @ .40  <b>Spirit Ammonia</b>, Arom. .44 @ .45  <b>Sulphuric Ether</b>. .54 @ .61  <b>Sumac</b>, Sicily, ton. 75.30 @ 77.50                      Virginia. 75.30 @ 79.00  <b>Tar Barbadoes</b>, gal. .46 @ .46  <b>Tin Crystals</b>, bbls., per lb. .13 @ .13                      Jars, per lb. .15 @ .15  <b>Tonka Beans</b>, Para, lb. .30 @ .35                      " Angostura 1.80 @ 2.00  <b>Turpentine</b>, Spirits. .26 @ .30                      Vanilla Beans, lb. 6.50 @ 13.00                      cut, lb. 5.00 @ 5.50  <b>Venice Turpentine</b>, barrels, lb. .18 @ .19                      Cans, lb. .19 @ .20  <b>Wax</b>, Brazil, Veg., lb. .17 @ .22                      Japan, lb. .07 @ .08  <b>Zinc Oxide</b>. .30 @ .46                 </p>	<p> <b>Animal and Vegetable Oils</b>.                      Linseed, raw, gal. .59 @ .59                      boiled, gal. .55 @ .55                      Lard, City, Prime, present make, gal. .61 @ .63                      West, prime, gal. .61 @ .62                      Cotton-seed, Prime, Crude, gal. .70 @ .30                      Summer Yellow, prime, gal. .13 @ .34                      Summer Yellow, off grades. .31 @ .31                      Prime White, gal. .36 @ .38                      Sperma, Crude, gal. .63 @ .65                      Natural Spring gal. .63 @ .65                      Bleached Spring gal. .68 @ .70                      Natural Winter, gal. .68 @ .70                      Bleached Winter, gal. .73 @ .75  <b>Whale</b>, Natural Winter, gal. .44 @ .44                      Bleached Winter, gal. .47 @ .47                      Ex. Bl'ch'd, gal. .49 @ .49  <b>Menhaden</b>, Crude, Sound, gal. .39 @ .33                      Dark, pressed, gal. .34 @ .35                      Light, pressed, gal. .36 @ .38                      Bleached, Winter, gal. .47 @ .49                      Extra Bleached, gal. .44 @ .44                      Tallow, City, prime gal. .52 @ .53                      Cocoonut, Ceylon, lb. .05 @ .05                      Cochin, lb. .03 @ .03                      Cod, Domestic, gal. .38 @ .40                      Foreign, gal. .48 @ .48                      Red Elaine, gal. .36 @ .38                      Saponified, lb. .04 @ .04                      Bank, gal. .35 @ .35                      Stratts, gal. .36 @ .36                      Olive oil, table, in tins. 50 @ 1.55                      Com'n, bbls., gal. .58 @ .65                      Rapeseed. .60 @ .65                      Neatsfoot, prime, gal. .60 @ .61                      Palm, prime Lager, lb. .05 @ .05                 </p>
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# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

ONE of the cleverest but most caustic criticisms of the dilatory tactics of Congress on the tariff has been issued by the *Mansfield, O. Sun* under the title of "What Congress Has Done on the Tariff." The handsome covers with the advertisement of the newspaper enclose a few sheets of plain blank paper. The point of this criticism remains keen. Action is still delayed. The Senate has acted upon the chemical schedule, however, and there seems to be some hope of ultimately reaching a vote.

THE coal strikes have resulted in a great scarcity of coal and all manufacturing industries are beginning to feel the effects of this. There seems every probability that a general advance in glass ware will follow, and we would advise our readers to close contracts for their supplies of bottles, etc., as soon as possible.

IN last week's issue a printer's error made us say *Europe* was represented in the list of honorary members of the Pharmaceutical Society of Great Britain by Professor ATTFIELD. Every one, of course, is aware that ATTFIELD is *England's* foremost pharmaceutical chemist, but the English pharmaceutical journals are touchy on matters of this kind, [hence the correction.

ONE of the queries proposed by the Georgia Pharmaceutical Association as reported in the newspapers reads: "Valerian and why is it Antidoting?"

This query, it is announced, has been accepted by R. L. TYE. Pharmacists, we apprehend, will be as much interested in knowing *where* it is antidoting and at whose instigation?

The funny side of the query has had its effect on our poetical editor who sends in the following:

Pray tell us why  
Dear Mister Tye  
Valerian is 'antidoting?  
And where and when as well as why?  
And which and how we weakly cry;  
Wherefore, whatfor,  
Whichway, howcome,  
Of knowledge we would have the sum,  
Why is valerian antidoting?

SPRING trade or what should have been the spring trade is a thing of the past, and of a somewhat disappointing past, it must be confessed. The summer dullness will probably not be more pronounced than usual and with the aid of the soda counter and of the usual demand for summer specialties will no doubt turn out at least fairly satisfactory. The excellent crop prospects and the dawning hope that the tariff matter may be settled by that time give grounds for anticipation of a prosperous fall season. Eras of depression such as we have been suffering from for the past two years are rarely of such long duration as is the present epoch and are invariably followed by a reaction toward an easier monetary condition.

DELMONICO'S has been selected as the place and the first week in October as the time for the meeting of the National Wholesale Druggists' Association in this city. The first business session will be held on Monday evening, October 1st, and the last on Friday. The committee was influenced in selecting the date by the fact that on the following week the annual meeting of the National Paint, Oil and Varnish Association will be held in Boston, and it was thought that out-of-town members would like to attend both conventions on the same trip. Details will be arranged later, and the composition of the committee is sufficient guarantee that all who attend will have an enjoyable time. JOHN M. PETERS is chairman and THOS. P. COOK secretary; their associates are WM. HULL WICKHAM, BRENT GOOD, THOS. F. MAIN, B. T. FAIRCHILD and W. H. SCHIEFFELIN.

## REFORMS NEEDED IN THE TREATMENT OF THE INSANE.

THE *New York Herald* is at present putting forth strenuous efforts to bring the existing condition of affairs in the City Insane Asylums to the attention of the Grand Jury. It claims to have made out a clear case of mismanagement against the asylum authorities; and some of the stories told are certainly revolting enough to warrant immediate action by the District Attorney.

Some of the evidence brought forward by the *Herald* in support of its charges would seem to indicate that a mistake had been made in abolishing the use of the straight-jacket as a means of controlling the fury of patients suffering from acute mania; for it is charged that physical restraint of this kind has been replaced by the use of hyoscyamine and chloral, drugs which stupefy and render unconscious the persons to whom they are administered. The *Herald* is wrong, however, in laying the blame for the alleged inhuman treatment of the city's insane poor on the medical officers in charge. No one who is in the least familiar with the management of the City Asylums for the Insane would think of blaming these gentlemen. The blame clearly rests with that curious body known as the Commissioners of

Public Charities and Correction, and if the *Herald* is really anxious to ameliorate the condition of New York's insane it should urge the Legislature to divorce the Department of Public Correction from the Department of Charities and institute a new commission in lunacy to have supervision over the insane poor of the city and county of New York.

#### NEWSPAPER POSTAGE.

THERE has been in progress an agitation looking toward a material advance in the rates of postage on second class matter which embraces all periodicals.

The cause assigned for the agitation lies in the postal deficiency, which really is only apparent. While it is true that the receipts of the postal service do not balance the expenditures, the discrepancy is due to the fact that the post-office department is compelled to transport enormous amounts of matter for other government departments for which service it receives no credit whatever. Therefore when Congress is called upon to make up a deficiency it is in reality only asked to pay this department for the services rendered to other departments of the public service.

If all the official letters, books, pamphlets, seeds, etc., which passed through the mails last year under the franking privilege had been charged for at the same rate as private mail matter there would have been an income therefrom of \$7,173,364, which would more than make up the so-called postal deficiency.

The rates of postage on periodicals was made low on two grounds, the first being that the newspaper press is in the nature of a public educator and that in fostering their growth the government is aiding the cause of public education. That this theory is a sound one must be admitted by all who give the matter adequate attention, for, however much and however justly we may inveigh against the sensationalism of the modern newspaper, we must admit that it is a powerful factor in the elevation and education of the masses.

The second factor in the case is the very small cost of handling this matter as compared with that of handling other mail matter, it being stated by competent experts that the cost of handling newspaper mail is but one-fortieth that of handling first-class mail.

A change has been proposed involving the payment of eight times the present rate on second class matter. If this change is made the readers and not the publishers will be called upon to pay the difference, for every publisher will be compelled to advance the subscription price of his paper sufficiently to cover the increased cost of the postage.

On the grounds above cited we believe that any change in the rate of second class postage would be to the detriment of the best interest of the public and feel

confident that the really public-spirited citizens of the country will exert their influence with Congress to prevent any legislation in this direction.

#### OPIUM AND THE TARIFF.

THE importance of the speculative movement in opium can best be understood by taking into consideration the quantities which have been moved, presumably in the furtherance of that deal. The value of the total imports of crude opium into the United States for the nine months ending March 31, 1893, was \$661,366, while for the corresponding period ending March 31, 1894, the value of opium brought in was \$1,252,045, or nearly double the quantity for 1893. The significance of these figures is enhanced when the fact is borne in mind that during the corresponding periods the total value of the importation of drugs into the United States, including opium, has decreased some twenty-four per cent.

That stocks of opium are being accumulated here is still further shown by the fact that whereas there has been a slight increase in the exports of foreign drugs from the United States during the past nine months over the corresponding period of 1893, opium is a striking exception, the value of the exports of that drug for the period under discussion having amounted to but \$1,477 in 1894, as compared with \$10,457 for the same nine months of 1893.

During this period also the domestic consumption has been decidedly below the average, as will be shown by consulting our weekly market reports.

Another significant fact is that during the month of March, 1894, alone \$609,008 worth of opium was imported, whereas during the nine months ending March 31, 1893, the total imports amounted to but \$661,366.

It will be clear from this that if a duty of one dollar per pound been imposed on opium the persons who had imported and are holding it would have made an enormous profit.

The action of the Senate, however, in putting opium back on the free list spoils a very pretty piece of speculation. Now comes news of better crop prospects and lower prices in Smyrna, which seem to give promise of a still lower range of prices, so that it seems probable that the speculators will meet with an actual net loss on their purchases as well as lose the prospective profits which they had reckoned upon on going into the deal.

#### THE SOCIETY OF CHEMICAL INDUSTRY.

A NUMBER of the American members of the Society of Chemical Industry of London met in the College of Pharmacy last Tuesday and discussed the advisability of forming a local section of the association in this country. It would appear

that American members who are manufacturing chemists or engaged in industrial chemistry are debarred from the benefits obtained by members in England, who meet at stated intervals and discuss subjects of interest to technical chemists. Some of the F. I. C. S.'s who are familiar with the proceedings of the American Chemical Society are of opinion that that body does not give sufficient attention to the needs of the technical chemist, and it is represented that the *technical* chemist as distinguished from the *scientific* chemist can derive no benefit from membership in it. Then, too, it is charged that the American Chemical Society is ruled too much from Washington, the impression conveyed being that the society is little more than a government bureau. This is something which, of course, can only be remedied from the inside. There seems to be a field for the establishment of a local section of the Society of Chemical Industry in this country, and it is to be hoped that the council of the society will see it in the same light. A list of the American members of the society is given elsewhere in this issue.

#### THE COMING MEETING OF THE A. P. A.

WE present elsewhere in this issue some interesting data concerning Asheville, N. C., the place selected for holding the next meeting of the American Pharmaceutical Association. While the time of meeting is still distant, we thus early call the attention of our readers to the subject, so that the attractions of Asheville and of the A. P. A. meeting will be taken into consideration when planning the summer outing.

The review of the Proceedings of the Association, which appears on page 281, will give to those who are not already members of the association some idea of the value of this annual report as a work of pharmaceutical reference. The possession of this volume alone is well worth the cost of membership in the association.

This is, however, the least of the benefits accruing from membership in this body. Its meetings each year furnish at once a delightful recreation and an opportunity for intercourse with the most progressive minds of the pharmaceutical world.

#### Queries Proposed by the A. P. A.

The scientific section of the American Pharmaceutical Association has proposed the following additional queries as subjects for papers for the Asheville meeting:

- Give the easiest method of identifying pure olive oil.
- What aloids are at present found in commerce and what is their source?
- How can retail pharmacists economically recover the alcohol from drugs exhausted by percolation?
- How does acetic acid compare with alcohol as a menstruum in exhausting drugs for extracts or alkaloids?
- How does acidimetric analysis compare with the use of Mayer's solution for estimation of alkaloidal salts?
- Give the best method of subduing or avoiding emulsion in assaying alkaloidal drugs.

Written for the  
American Druggist and Pharmaceutical Record.

## EXTRACTUM CARNIS HUMANA.

By WILLIAM B. THOMPSON,  
Philadelphia.

The use of exsiccated substance of animal glands, powdered, as agents in therapeutics, would seem to be based upon the Hahnemanian theory of "*Similia Similibus*." The sound flesh of a healthy organ being availed to correct the diseased state of a similar organ. It is certain we shall always have enthusiasts enough to adopt new remedies, and it does not seem to signify how inconsistent, or incongruous the principle may appear, yet there will be early followers and believers. Before conclusions are accepted, however, observations should be made wisely and results, where traceable, explicitly and accurately stated. In time we should at least have information the accuracy of which can reasonably be questioned or confirmed by investigators who are always prepared to take up scientific work upon reliable data.

One of the applications of glandular extract which seems to have received more than usual notice is that of the "Thyroid." This is applied to the treatment of goitre, and to that condition which supervenes, or is an accompaniment to it, "Cretinism." Some facts of information in regard to the latter can now be revived for the benefit of those who may not be familiar with it. Physical, mental and moral degradation can hardly be sunken to a lower level than that to be observed in the Cretins of Valais, and the Blafards. These creatures are deaf, dumb idiots almost insensible to blows, and have "goitres," or swelled necks, sometimes enormously pendulous, descending to the middle of the body. They are neither furious nor mischievous, but absolutely foolish and incapable of thinking. They only experience a sense of physical want, and are excessively fond of all the pleasures of sense.

The inhabitants of the Valais regard these Cretins as saints, and tutelary angels; those who have them not in their families think themselves seriously at variance with heaven. The Cretins have a very livid skin: they are born stupid and imbecile, and remain so until death, unless a remedy can be administered to their physical and moral state. Such is also the case of the Blafards, whose stupidity is equal to that of the Cretins, and if they are not entirely deprived of the gift of speech they are so much the more maltreated, as regards the senses of sight and hearing. These persons are condemned by the structure of their eyes to shun the light like owls. They are very weak; their height rarely exceeds four feet five inches; their complexion is of a pale white, the color of linen, or white wax, without any shade of carnation, or red; small, gray, lenticular spots are sometimes distinguished on them; they have no beard; in Africa their hair is woolly, and frizzled, in Asia long, and straight; their eyebrows and lashes are silken, and their eyes are formed like those of partridges. These unhappy beings terminate their sad career at the age of about thirty years, having merely existed, not lived. They are principally met with about the center of Africa, at the extremity of Southern Asia, in the islands of the south, and at Darien in the New World.

We have no such positive cases, as above described, however, to come under observation in this country, but quite numerous instances of "goitre" are met with in practice, and it is upon the latter,

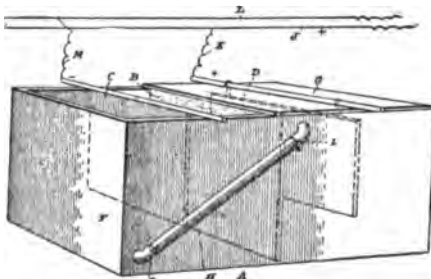
we presume, that the virtue and effect of the new agent, and the principle involved will be demonstrated. There is already some evidence proffered, but would it not be wise, for the present, to receive this "*Cum grano salis*?"

Written for the  
American Druggist and Pharmaceutical Record.

## MANUFACTURE OF CHLORATES BY ELECTROLYSIS.

By HENRY BLUMENBERG.

The production of the chlorates has been up to the present date invariably made by leading chlorine gas through a warm saturated solution of an alkali. Various improvements have been attempted and brought forward. One of the earliest was that of St. Romer of Vienna (1821) by leading chlorine gas into a chamber containing a carbonate of the alkali for a fixed period, then heating, and later on subjecting the same to a lower temperature; or, in other words, cooling it. The chamber was opened and cakes of potassium chlorate removed. This was afterward freed from the chloride by re-crystallization.



APPARATUS FOR THE MANUFACTURE OF  
CHLORATES BY ELECTROLYSIS.

FIG. 1.

Another process was brought forward by M. Vee which was analogous to the one brought forward by Baron Liebig, which consisted of heating a solution of calcium chloride and water in a retort and then adding a sufficient quantity of potassium chloride to raise the temperature and also the density of the solution. Special care was, however, taken that the solution did not boil by the liberation of oxygen. The concentrated liquor was set aside in a cool place where a deposit of chlorate was formed mixed with a percentage of chloride, which was eliminated in a second crystallization. The mother liquors were concentrated so that any chlorate contained in them was deposited.

The processes being used at the present date are only improvements on the above, milk of lime being submitted to the action of chlorine in a heated state and resolved into chlorate and calcium chloride. To the above, which must be in a concentrated state, potassium chloride is added, the following reaction taking place  $\text{Ca}(\text{ClO}_2)_2 + 2\text{KCl} = 2\text{KClO}_3 + \text{CaCl}_2$ .

There are minor details in practice which vary in different places, such as mixing milk of lime and the potassium chloride and then submitting the chlorine in presence of one to the other.

Another process was brought forward by W. Weldon by which he substitutes magnesium chloride in place of lime, which can be constantly regenerated by roasting and leading a current of dry steam over or through it. This gives a by-product, namely, hydrochloric acid.

As I have given the various ways and processes that have been tried for the production of chlorates by direct chemical

means, mainly, as can be seen, by artificial products, I will take the liberty to give some of the latter processes by electro-chemical means and natural products, namely, the chlorides of the metals of the alkalies and alkaline earths.

It may be said that Gautherot was the first who electrolyzed a salt solution (1801), followed closely by Ritter, Volta, Marianni and later on by Becquerel. Hisinger and Ranzelius observed that when an electrolyte consisting of sodium chloride is electrolyzed with silver electrodes hydrogen gas is evolved at the cathode, and later on chlorine at the anode. The anode also becomes covered with silver chloride. The liquid near the anode contains chlorine and around the cathode soda is found.

Higgins and Draper also observed that chlorine was set free at the anode and hydrogen at the cathode.

Mattiesen later on electrolyzed a fused mixture consisting of potassium and calcium chlorides and observed that chlorine was liberated at the anode and potassium accumulated around the cathode.

Davy had before this in 1807 made his immortal discovery of the metals of the alkalies. This caused the above experiments to be carried out thoroughly, but the facts as to the secondary results, the influence of electrolytic oxygen in the nascent state, were mainly brought forward by Daniell, Smee, Miller, Becquerel, Faraday and Kolbe.

Kolbe states in his admirable work on inorganic chemistry that if a concentrated solution of potassium chloride is electrolyzed by a powerful electric current, using platinum electrodes, the nascent oxygen which is set free at the positive pole oxidizes the potassium chloride to chlorate. Again we have another article written by Prof. Kolbe, which was reviewed by Prof. Miller, who states as follows:

Many of these secondary actions are very interesting. Kolbe has devoted particular attention to the effects of oxygen when liberated during electrolysis of an acid solution of potassium chloride. Chlorate and chloride of potassium were invariably formed. Then again in reference to the nascent state of bodies it is obvious from the powerful effect which oxygen produces at the moment of liberation from compounds during electrolytic decomposition that such oxygen must be in a condition very different from that in which it exists when once it has assumed the gaseous form. Oxygen is not insoluble in water, and it is therefore possible to bring it in small quantity at a time into chemical contact with salts or other bodies which water may hold in solution. Oxygen gas may, however, be transmitted for an unlimited time through a solution of chloride of potassium without effecting the conversion of any portion of the chloride into chlorate, or into perchlorate of potash, and yet as has been mentioned in the foregoing paragraph this change is easily effected by oxygen as it escapes during the electrolysis of an acidulated solution of the chloride of potassium.

Now, it may look very peculiar that with all these various experiments that were carried on they were never carried to actual practice, the cause being the excessive cost of producing electricity in that time which has now been overcome, and also the very small yield of chlorate.

Various makers will now guarantee a commercial efficiency of 95 per cent. of their dynamos, and even with this guaranty there has not with but few exceptions been any success achieved in this direction, the reason being that the amount of chlorate produced was so small that there was actually no margin for profit. The experiments of Kolbe and Miller demonstrated only from a scientific standpoint what could be done, but what has been achieved has not been told.

The production of chlorates as referred to by Kolbe and Miller can never with our present knowledge be carried out practically. Of this I am firmly convinced from actual experiments.

The electrolyzation of chloride of potassium as carried on by the named professors



without having their electrolyzation vat divided into electro-negative and electro-positive divisions may look very feasible from a theoretical standpoint—namely, in the amount of electric current used and also the lower resistance, but in practice cannot be compared with the processes of Gall and Montlaur, Franchot and Gibbs, and processes of my own.

I do not mean to say that there is not enough chlorate produced by the processes or experiments of Kolbe and Miller; but a very large percentage is reduced by the liberated hydrogen, also by the electric current under some conditions, and these disadvantages prevent us from realizing practically anywhere near the theoretical yield.

The above disadvantages have prevented almost to the present date, with the exception of a few cases to my knowledge, the production of chlorate by the electrolyzation of a chloride.

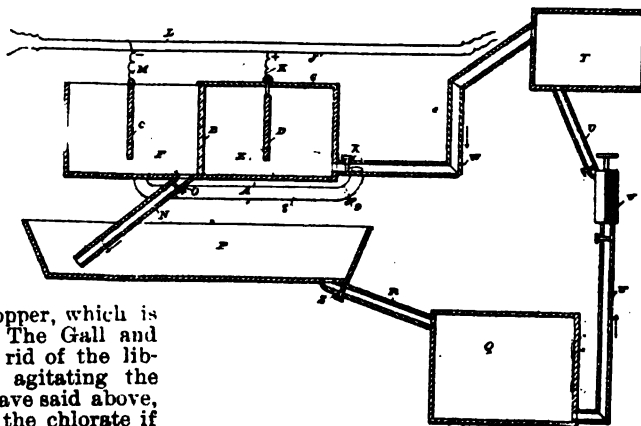
The exceptions are those which were enumerated above—the processes of Gall and Montlaur, Franchott and Gibbs, and processes of my own.

The Gall and Montlaur process seems to be the pioneer in the production of chlorate in actual practice. Having their plant erected in Switzerland—presumably near some waterfall—they are producing the chlorate from a chloride at a considerably lower cost than the chlorates produced by direct chemical means. The Franchott and Gibbs process of which we have heard very little lately has the advantage of getting rid of the hydrogen by chemical means, namely, in reducing an oxide of copper, which is the negative plate. The Gall and Montlaur process gets rid of the liberated hydrogen by agitating the electrolyte; for, as I have said above, the hydrogen reduces the chlorate if there is not something done to prevent it. In these processes of Gall and Montlaur and of Franchott and Gibbs and in my own we depend solely, after the chloride is electrolyzed, on recombining our acid and basic radicals in producing the chlorate, and of course the vats are divided into electro-positive and electro-negative divisions, which is directly opposite to all the earlier experiments and the direct oxidation processes. In our processes the hydrogen has a tendency to reduce the hypochlorites instead of the chlorates which latter danger, as I have stated above, is eliminated by getting rid of the hydrogen by mechanical or chemical means.

Now, as to the advantages of the electric processes for the production of chlorate it must be clearly seen that to produce chlorates from artificial products it must cost considerably more than from natural products. Of course, it will take some time before the large manufacturers of chlorates will see this, for the simple reason that the amount of money invested in alkali works which are now producing soda by the Le Blanc and other processes (in which chlorine gas is obtained as a by-product, and is then led into lime chambers forming bleach and, as shown above, chlorates) prohibits them from changing their plant except at a large expense and under various difficulties, such especially as violating the laws, as in England, where the chlorine must

be used or consumed and must not find its way in any way, shape or form into the rivers or into the atmosphere. Some individuals have said that there were various processes tried and proved failures. I know of some slightly which were tried, not in producing chlorates, but in abstracting money from stockholders' pockets, but even these processes, if they were given a little more mechanical, chemical and electrical attention, would yield a fair profit. The production of the chlorates by electrolysis has come to stay just as the electrolytic caustic soda and chlorine gas processes. They are built on solid theories and have been brought down with but few exceptions to solid practice. Individuals may call them snares and delusions for private gain, but the success of the same will be the answer.

Generally stated, in carrying my process into effect, I prepare an aqueous solution containing a bromide or chloride corresponding to the chlorate or bromate desired. For this purpose, a vat is used, such as shown in Figure 1 for example. This vat is usually divided into two compartments by a porous partition, or instead a porous vessel may be placed therein—in either case the vat being divided into two compartments. An electric battery with the opposite wires lead-



APPARATUS FOR THE MANUFACTURE OF CHLORATES BY ELECTROLYSIS.

FIG. 2.

ing to electrodes placed in the compartments of the vat is provided, the circuit being closed through the aqueous solution therein. The bases are set free in the electro-negative compartment, and the halogen in the electro-positive division. If the nascent hydrogen reduces in the electro-negative compartment, the electrode therein may be agitated to prevent such action. That is to say any excess of hydrogen will have a tendency to polarize the negative electrode, which tendency is obviated by agitating that electrode. Otherwise that part of the electric current employed in electrolyzing would then be trying to overcome this state of polarization, and would show itself in an undue rise of the 120° temperature in the bath. Then again hydrogen must be gotten rid of to a certain extent to prevent its combining with the chlorine, and thereby forming hydrochloric acid, which would react upon the hydrate of potassium till they would be mutually neutralized, forming again the chloride of potassium.

In the exemplification of my invention I will place in the vat a potassic chloride. The electric current separates it into its respective halogen and base. The potassium in this case being the base, will be deposited in the electro-negative compart-

ment, where it takes up one atom of oxygen from the electrolyte and also sets free one atom of hydrogen forming caustic potash.

Fig. 1 is a perspective view of an electrolytic bath to which I have applied my improvements. Fig. 2 is a diagrammatic view embodying my improved process.

Referring to the drawings—A represents the vat.

B is the porous partition dividing the vat into the usual positive and negative compartments.

C is the negative electrode, such as cobalt, platinum, iron, carbon, nickel, or other suitable material.

D is the positive electrode, preferably platinum.

E is the positive and F the negative compartment. The electro positive division E is covered by a top G fitting airtight thereon. The upper portion of compartment E contains halogen or acid radicals set free during electrolysis. Compartment F contains the electro negative caustic solution or basic radicals.

H is a pipe leading from the upper part of the electro-positive division to the lower part of the electro-negative division, preferably outside the vat A, and provided with valve I at either end, for closing or opening the pipe.

J is the positive wire, having a branch K leading to electrode D, and L, the negative wire having a branch M leading to the electrode C, from any suitable battery.

In Fig. 2 is shown a pipe N, having a valve O therein, leading from the electro-negative tank F, by means of which the tank F may be discharged into the vessel P below. Vessel P is designed to receive and hold the bromates and chlorates, in which they may be allowed to settle.

Q is a vat for holding the residue of the process.

R is a pipe, having a valve S therein, through which the vessel P may be tapped to draw off the material other than the bromates and chlorates.

T is a resaturator-tank having connection with the bottom of vat Q by a pipe U in which is placed a pump V for forcing the residue with water up into said resaturator to utilize the product over again.

W is a pipe, having a valve X, leading from the resaturator near its top, back into the electro positive compartment E.

The resaturator T contains material to make the product.

10 is a deflecting apron for the purpose of forcing the discharge into the bottom of the gas-holder before it is fed again to the vat A.

The following operation of my improvements will be described: An electrolyte having, in a solution of water, say potassic chloride, is put in the vat A. I then electrolyze the same. The halogen or acid radical chlorine goes to the electro-positive division, the potash to the electro-negative division, decomposing the water there and forming caustic potash. The electro positive division E being airtight, as soon as the chlorine is liberated it rises in the air above the electrolyte, goes through the pipe H, and decomposes the caustic solution in the electro-negative division F, forming chlorate and chloride of potash.

In Fig. 2 the product and by-product are gathered in vessel P. Here the product settles in the bottom of the vessel and the by-products are let through pipe R into the receiving vat Q. The pump V pumps the by-products through pipe U into the resaturator T, which contains potassic chloride, and resaturates the once-used electrolyte. Then, if valve X is opened in pipe W the by-products are

carried to vat A and the process is carried over again.

8 is a pipe, having the valve 9, tapping the compartment F and the pipe W, by means of which the by-products may be led into both compartments E and F. The electric current needs only to have its voltage high enough to overcome the affinities of the halogen for the base.

The by-product varies according to the original substance put into the vat. If chloride of potassium be the material to produce the desired chlorate the by-product is then chloride of potassium, caustic potash water, chlorine gas, hydrochloric acid, a little chlorate of potash, and a percentage of the original impurities which the original chloride of potassium contained before putting the same into the vat. I prefer to have the vat at a temperature of 120° Fahrenheit in order that the hypochlorite formed will be resolved into chlorate and chloride of potassium.

### Extraction Battery for Alkaloidal Assaying.\*

BY PROF. JOHN M. FRANCIS.

Although the Pharmacopoeia of the United States has not fully recognized the importance of an exact standardization of our alkaloid-bearing galenicals, in accordance with the amount of these constituents contained, yet the emphatic opinion of physicians as manifested in practice, no less than the moral and, I may say, financial responsibility of the manufacturers, has long since demonstrated that all such pharmaceutical preparations whose active constituents are known should be estimated.

Without entering further into a discussion of the merits of a question which is fast working out its own solution, I propose to submit to the readers of the *Bulletin* who are interested in such matters,

method more automatic, expeditious, economical, and at the same time thoroughly reliable.

This battery consists of a frame of  $\frac{3}{4}$ -inch piping 32 inches high and 7 feet long, supporting a grooved plank 6 inches wide, 8 feet long and  $\frac{1}{4}$ -inch thick, to which are strapped by inch copper bands (controlled by thumb screws) sixteen condensers. For attachment to these condensers there are sixteen extractors ("perforators"—see Fig. 2). The receptacles for the extractive fluid—ether, chloroform, etc.—are 4-oz. wide-mouth flasks; these are accurately fitted by corks to the arms of the extractors, and rest upon openings in the top of a copper steam-bath.

The steam-bath is 8 feet long, 5 inches deep, and  $4\frac{1}{4}$  inches wide; the openings in this bath are sixteen in number, diameter  $1\frac{3}{4}$  inches, and closed when not in use by ground brass caps. Heat is furnished by two brass pipes  $\frac{3}{4}$  inch in diameter. The

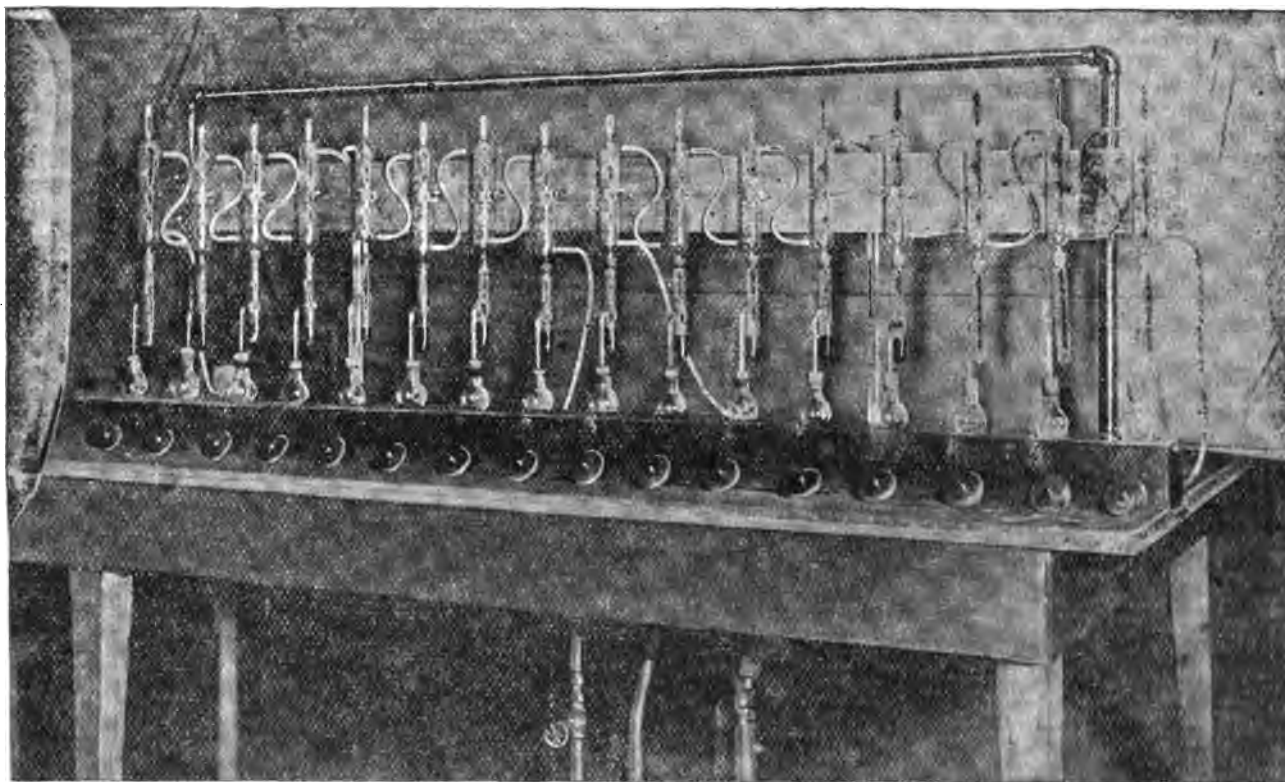


FIG. 1. PROF. FRANCIS' EXTRACTION BATTERY.

My claims are stated as follows in my United States patent specifications:

1. The combination of an electrolytic bath having positive and negative compartments, a pipe connecting the two, a settling tank connected with said bath, another tank, located between the settling tank and bath, and pipes connecting them into a continuous system.

2. The herein described process which consists in placing an electrolyte containing a haloid salt in a vat, electrolyzing the same, thereby setting free the halogen at the positive electrode, and the base at the negative electrode, and finally transferring the liberated gas from the positive to the negative electrode, and thereby bring it into contact with the base.

3. The herein described process which consists in placing an electrolyte containing a haloid salt in a vat, then electrolyzing the same, thereby setting free the halogen at the positive electrode and the base at the negative electrode, transferring the liberated gas from the positive to the negative electrode then conveying the liquid electrolyte to a settling tank, and then leading the by-products of the electrolyte to a resaturator and back to the vat.

a diagram, which is almost self-explanatory, of the battery of extractors which we regard now as indispensable to our laboratory.

Different methods of extracting alkaloids have been proposed from time to time, and almost every chemist pursues some pet method, or modification of a method, which seems to him best adapted to his purpose. The principal objection to the majority of these is that they require constant attention or personal manipulation throughout the operation; furthermore, most of them are somewhat expensive or complicated. If one is burdened with spare time, or has only an occasional assay to make, these leisurely methods are sufficient; but to the busy pharmacist, or for the chemist employed in the pharmaceutical laboratory where alkaloidal assays come in never-ending succession, there is a keenly felt want of some

estimated cost—about \$75—for such an apparatus is not exorbitant.

The extractors noted are made according to the design of Bosman's modification of the apparatus of Van Ledden Hulsebosch.\* Measurements are given with the cut, so that anyone with a reasonable degree of skill can make such an extractor.

Before conclusion, a word as to the efficiency of this apparatus. Our practical experience in this laboratory is probably second to none in extent and variety, as our books for 1893 show nearly 1,500 alkaloidal assays made upon marketed products, and hence we are in a position to test thoroughly this method. We have employed this battery for about two months and found it reliable, economical, and labor-saving.

Pharmaceutical Laboratory of Parke, Davis & Co., February, 1894.

\*See *Pharm. Centralhalle*, 1893, p. 101, *Pharm. Rundschau*, 1893, pp. 81 and 186, and *AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD*, vol. 22, pp. 180, 372 and vol. 23, p. 113.

Read the "trade notes" and the market review every week if you want to keep posted.

\*Reproduced by courtesy of the *Bulletin of Pharmacy*.

## Pharmaceutical Progress.

**Iodocasein** is a yellowish powder with a faint odor of iodine which is recommended by Prof. Rohrmann as an antiseptic dressing either alone or precipitated on gauze.

**Essential Oil in Asparagus.**—Crouzel has ascertained that the peculiar odor of the urine after eating asparagus is not due to the presence of asparagin, but to a volatile oil which he has extracted from asparagus, and from urine passed after eating asparagus (*Deutsch. Med. Ztg.*, through *Pharm. Centr.*, xxxv, 217).

**Antirabic Serum.**—Tizzoni and Cattani have produced an antirabic serum (*Pharm. Post*) giving the highest immunity by using large animals instead of the small ones heretofore employed. This serum is claimed to be absolutely innocuous, producing no infection whatever. It is also stated that it is efficacious even after the first symptoms of hydrophobia have made their appearance and to be almost instantaneous in its effect.

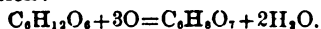
**Canadine.**—E. Schmidt describes the production of pure canadine from hydrastis rhizome. The alkaloid was obtained in white needles melting at 132°.5, and proved to be tetrahydroberberine, isomeric with hydroberberine, and yielding berberine when a solution was exposed to light and air. Numerous salts and other compounds of canadine are described, for details of which reference must be made to the original account (*Archiv.*, ccxxxii., 186).

**Camphorated ethyl iodide** is recommended by Vielguth (*Deutsch. Med. Zeit.*) as a subcutaneous injection in the treatment of cholera in conjunction with the treatment with salt water infusions and tannin injections. So long as the absence of vomiting makes it possible a 10 per cent. solution of sodium dithiosalicylate should be administered internally. As no intimation is given of the nature of "camphorated ethyl iodide" it is presumably a solution of camphor in ethyl iodide.

**The Edible Lichen of Japan.**—Dr. M. Miyoshi, of Tokio, describes in the *Botanisches Centralblatt* (vol. lvi, 1898, pp. 161-163) the edible lichen of Japan known as "iwatakun," and names it *Gyrophora esculenta*, sp. nov. It owes its economical value to the large amount of starch and of gelatinous substance which it contains. It has no bitter taste nor purgative properties. It is very abundant in some parts of Japan, growing especially on moist granite rocks in mountainous districts, which it frequently entirely covers. It is collected in large quantities by the mountaineers, dried and sent into the towns, whence a considerable amount is exported. It is largely used as a condiment in Japanese cookery.

### Artificial Production of Citric Acid.

In studying the conversion of sugar into oxalic acid under the influence of certain fungi, Dr. C. Wehmer discovered another analogous kind of fermentation by which citric acid is produced from sugar. The change is probably the result of a process of oxidation represented by the following equation:



A full description of the conditions under which it takes place was given in a paper communicated to the Berlin Academy of Sciences last June. This mode of producing citric acid is now being worked at Thann and Mulhausen, and there is a prospect that, in addition to its scientific interest, it will be of industrial import-

ance. In connection with this subject the *Kew Bulletin* calls attention to the interesting coincidence that citric acid has been found in sugar cane juice, and that it sometimes makes its appearance during the process of sugar manufacture.

**Ointment Bases.**—Shoemaker (*Medical News*) reviews and discusses the various ointment bases, and concludes that in the majority of cases our choice must rest upon lard or lanolin. Petroleum jelly resists chemical change and is pleasant in

of salicylic acid with 10 drams of lanolin. Dissolve 5 grains of hydrochlorate of cocaine in a small quantity of warm alcohol and mix the solution with 1 fluid ounce of creosote. Mix  $\frac{1}{2}$  ounce of melted white wax with  $\frac{1}{4}$  ounce of vaselin and add the creosote solution. To this add the cocaine solution and mix.—*St. Louis Clinique*.

**Iodine and Starch.**—E. G. Rouvier, in a further communication on the fixation of iodine by starch (*Ph. J.*, ante, p. 343), states that when the proportion of iodine is between 13 and 17.5 per cent., the quantity fixed is almost proportional to the cube root of the quantity added. When below 13 per cent. the quantity of iodine fixed increases more rapidly, but with more than 17.5 per cent. present the increase proceeds much more slowly. Potato starch appears, in the presence of a large excess of iodine, to fix a lower quantity than wheat starch, but rice starch behaves exactly the same as the latter (*Comp. rend.*, cxviii, 743).

### Sodium Borosalicylate.

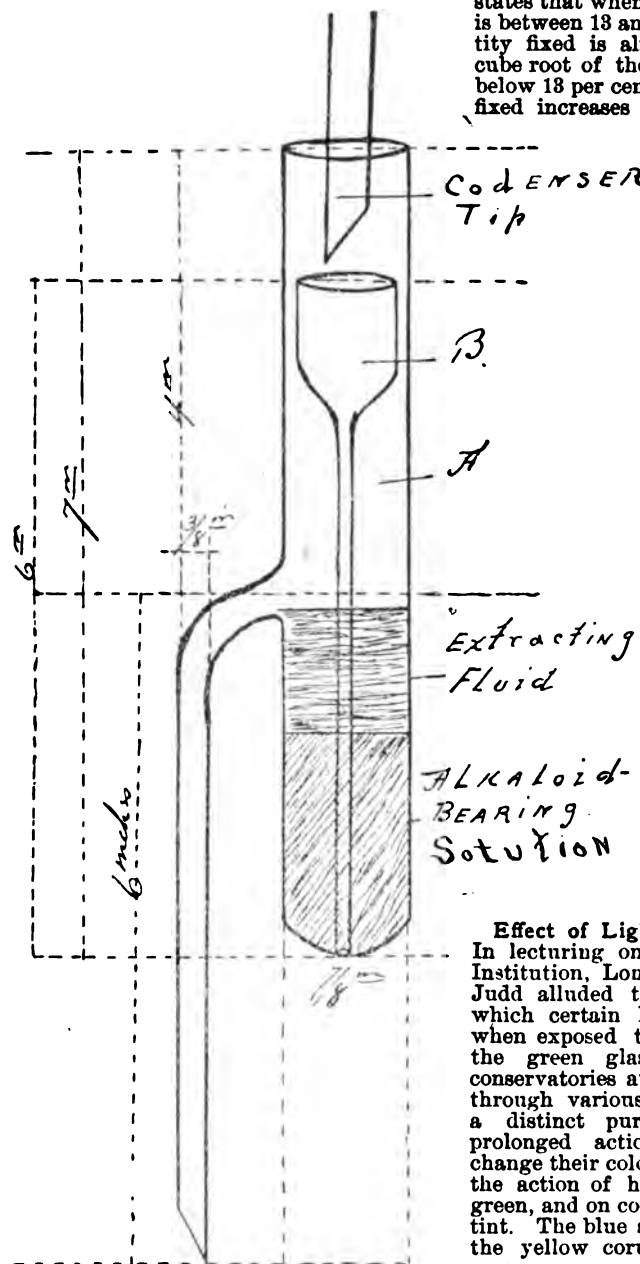
—P. Adam prepares this compound by heating together boric acid and sodium salicylate in the presence of water. A syrupy liquid is produced which yields, on evaporation, a transparent horny substance. This when carefully desiccated becomes a white opaque mass. It dissolves in four times its weight of cold water, and in its own weight of water at 40°. It is also soluble in methylic, ethylic and amyllic alcohols, acetic ether, and glycerin, slightly soluble in acetone, but insoluble in ether. Solutions made by the aid of heat remain supersaturated (*Bull. de la Soc. Chim.* [3], xi, 204).

### Effect of Light on Colored Glass.

In lecturing on the ruby at the Royal Institution, London, recently, Professor Judd alluded to the changes in color which certain kinds of glass undergo when exposed to light. He said that the green glass panes used in the conservatories at Kew gradually changed through various shades of yellow to a distinct purplish hue under the prolonged action of light. Rubies change their color in a curious way under the action of heat. Blue rubies turn green, and on cooling regain their original tint. The blue sapphire turns white, and the yellow corundum crystal becomes green.

### An Alloy Which Adheres to Glass.

M. F. Walter has found that an alloy consisting of ninety-five parts of tin and five parts of copper adheres so tenaciously to glass that it may be employed as a solder to join the ends of glass tubes. It is obtained by adding the copper to the tin previously melted, agitating with a wooden stirrer, casting or granulating, and then re-melting. It melts at about 360 deg. C. By adding from a half to one per cent. of lead or zinc, the alloy may be rendered either softer or harder, or more or less easily fusible. It may also be used for silvering metals or metallic thread.—*Revue Scientifique*.



MODIFIED HULSEBOSCH EXTRACTION APPARATUS.—SEE PAGE 275.

FIG. 2.

appearance, but it is apt to be contaminated with irritant impurities, and its absorbability is slight. Lard is readily absorbable, but readily undergoes decomposition. Lanolin is almost devoid of odor, very rapidly absorbed, aseptic, and unalterable.

**Cornicide.**—Lanolin forms the basis of another salicylic-acid plaster, and cocaine is added with the idea of making it painless. To form the plaster, mix 6 drachms

**Thioform** (bismuth dithiosalicylate) is further lauded by L. Hoffman (*Berlin thierärztl. Woch.*, 1894, No. 14), who states that when bleeding wounds are freshly sprinkled with it it stops the bleeding, and that thioform gauze has the same property. It is also recommended as a partial substitute for cocaine in ophthalmology, as it has an anæsthetic action when sprinkled in the eye. It is described as follows (see also this journal for July 27, 1893, page 42, and for November, 1893, page 294): It is insoluble in water, alcohol and ether, partially soluble in alkaline aqueous solutions, in blood or in serum, a quadri-basic bismuth salt of dithiosalicylic acid being formed which is insoluble in alkaline media while at the same time a portion of the dithiosalicylic acid combines with the alkali forming a soluble salt. The fact that dithion (sodium dithiosalicylate) when used direct does not yield such satisfactory results as do the salts obtained from thioform is explained by the presence of the bismuth salts in the latter which act as absorbents of moisture.

**Glycero-Phosphates.**—At the Academy of Medicine recently Dr. Albert Robin read a communication concerning the first results obtained by him by means of a new medication which he finds to exercise a specific action on nervous nutrition. The treatment is by glycero-phosphates. By these he hopes to obtain effects at least equal to those produced by the famous Brown Séquard elixir. Assuming that the qualities of "sequarine" are probably only due to the phosphorus it contains, Dr. Robin has experimented with a preparation of glycerin and phosphorus, obtaining excellent results in influenza convalescence, etc. He speaks of his new medicament as exercising the contrary effect to antipyrin, the latter being given in cases of intense nervous excitability, whereas glycero-phosphates are intended as a treatment for nervous depression. The new preparation appears to resemble Dr. Ashburton-Thompson's solution. L. Portes and G. Prunier describe a process for preparing the calcium salt. Phospho-glyceric acid is first prepared by maintaining a mixture of liquid phosphoric acid and glycerin at a temperature of 100° to 110° for six days. After cooling, calcium carbonate is added until the acid is neutralized. The precipitate formed is dissolved in cold water, and the solution filtered and evaporated at a low temperature. The product is a white, slightly crystalline powder, which is soluble in fifteen parts of cold water, almost insoluble in boiling water, insoluble in alcohol, and gives but a faint reaction with ammonium molybdate (*Journ. de Pharm. et de Chim.*, [5], xxix, 398).

**The Martindale Herbarium.**—*The Bulletin of the Torrey Botanical Club* notes the purchase of this herbarium for the Philadelphia College of Pharmacy, and considers it another evidence of the rapid advance of modern pharmacy along sound, scientific lines. It says: "It will be recalled that the herbarium of Wm. M. Canby was purchased some months ago by the New York College of Pharmacy, and an account of it was at that time published in the *Bulletin*. Although the Martindale collection is not nearly as extensive as the one secured by the New York institution, and the specimens are not nearly as fine nor as well named up, it is a most valuable accession to the teaching equipment of the Philadelphia college, whose officers are to be heartily congratulated on its acquisition. Mr. Martindale was a diligent student of the marine Algæ, and his herbarium is rich in specimens of

these plants. The deposition of these two important private herbaria where they will be maintained and their growth continued in practical directions is an important occurrence in the history of economic botany."

**Sulphanilic acid** (para anilin sulphonic acid), which was recommended in 1883 by Ehrlich and Krönig for the treatment of iodism, has been strongly recommended by Valentin (*Corresp. Bl. für Schweiß Aerzte*) as an excellent and prompt agent for the suppression of certain symptoms of acute catarrh. The swelling and the watery secretion of acute coryza are either very much lessened or totally banished in less than two hours by this remedy; while less certain it is almost equally efficient in laryngitis, reducing the redness. In catarrh of the middle ear it removes the pain if it does not cure the disease. The duration of the relief is not very great. After 24 or 48 hours the dose should be repeated. The medicine is non-poisonous in a dose of as high as 8 grammes (123 grains) per day. The exhibition of from 1 to 2 grammes daily for from four to six weeks did not disturb either the digestion or the other functions save that a slight diarrhoea occasionally showed itself. It is best to administer 40 to 80 grammes and 200 grammes of water daily in two doses of a solution consisting of 10 grammes of pure sulphanilic acid, 8.5 grammes of sodium bicarbonate.

**Calcium Di-phosphate.**—A. Joly and E. Sorel, in describing the action of water on this compound, state that if crystals of the hydrated salt be thrown into boiling water they are rapidly disintegrated, and the liquid, which is acid to litmus, though neutral to methyl-orange, is found to contain a mono-phosphate. On examining the deposit formed, by means of a microscope, no trace of crystallization is visible, and analysis shows it to consist of an almost pure calcium tri-phosphate. After drying at the ordinary temperature over sulphuric acid, the composition of this compound was found to be  $2\text{Ca}_3(\text{PO}_4)_2 \cdot \text{H}_2\text{O}$ . If ebullition be maintained and the volume of water kept constant, a second reaction takes place between the liquid and the deposit. Small crystals appear, very slowly if the proportion of the calcium di-phosphate were less than one per cent., more rapidly if between that and fifty per cent., but in any case the reaction is complete in about three hours. The final product is a partly amorphous mixture,  $\text{CaO} \cdot \text{P}_2\text{O}_5$ , when not more than ten grammes per liter of calcium di-phosphate is used. Crystallization is total however, with larger proportions, an intermediate phosphate apparently being formed, thus— $\text{Ca}_3(\text{PO}_4)_2 + 4\text{Ca}_2\text{H}_2(\text{PO}_4)_2 + 2\text{H}_2\text{O}$ ; while with very large proportions, the crystals of the latter are found mixed with those of an anhydrous bi calcium salt. The transformation of the crystalline hydrated calcium di-phosphate into the crystalline anhydrous salt, by the action of boiling water, appears therefore to be effected in two different stages, the amorphous calcium tri-phosphate being the intermediate product (*Comp. rend.*, cxviii, 738).

**Castor Oil as an Adulterant.**—L. Maupy describes a method of detecting castor oil in croton oil or copaiba, which is based on the reaction that occurs when castor oil is subjected to dry distillation in the presence of potash or soda, sebatic acid and caprylic alcohol then resulting from the decomposition of ricinoleic acid, thus— $\text{C}_{18}\text{H}_{34}\text{O}_2 + 2\text{KOH} = \text{C}_{18}\text{H}_{32}\text{K}_2\text{O}_4 + \text{C}_8\text{H}_{16}\text{O} + \text{H}_2$ . The sebatic acid, obtained

by treating the alkaline sebicate with a mineral acid, is insoluble in cold, but soluble in boiling water. Oleic acid submitted to distillation also yields sebatic acid, but the latter is not produced from olive or poppy oil in presence of excess of alkali, and it is probable that in this respect castor oil may be peculiar. In testing suspected copaiba ten grammes of it is warmed gently in a silver capsule with as much dry caustic soda. When the effervescence subsides the odor of caprylic alcohol will indicate the presence of any castor oil. Subsequently, the product of the reaction is treated with about fifty grammes of distilled water and warmed to assist solution. When cold the insoluble resin is filtered out, and the liquid treated in a porcelain capsule with excess of nitric acid. It is then boiled and filtered while hot. On cooling, if castor oil has been present, a white precipitate of sebatic acid forms, which is soluble in boiling water, and precipitated from the solution by subacetate of lead as sebicate of lead. This process is said to detect as little as a few drops of castor oil in ten grammes of copaiba. In the case of croton oil the procedure is the same, except that only five grammes of oil should be treated and the other substances reduced in quantity by half (*Journ. de pharm. et de chim.* [5], xxix, 362. Through *Pharm. Journ.*).

#### A Novelty in Poison Bottles.

R. Watson Cuncell writes to the *Monthly Magazine of Pharmacy* concerning a novel idea he has for a poison bottle. The cork is simply cut in two, horizontally, near the small end, and the entire cork threaded on a string with a knot below the lower segment of the cork. The free end of the string is attached to a label bearing the word poison.

On the cork being fitted to the bottle containing poison there are several things which attract attention, even in the dark. First, the string; second, the label (bearing the word poison); if these are not noticed, then if the cork is seized and pulled, only the upper segment comes away, sliding on the string, and the contents of the bottle cannot be poured out. It is necessary to pull on the string itself in order to remove the cork entire. This appliance can be made by any one, costs nothing, is effective, and suits any bottle or phial. The boy could easily prepare a few dozen of these corks, all sizes, ready for use or for sale in the shop. On the bottle itself the poison label should always be stuck above the directions so as to be seen first, as, when the poison label is placed at the bottom of the bottle or phial, it is often covered by the hand grasping the bottle, and is not seen. I hope this simple device will be rapidly made known to the public by doctors, chemists, druggists, and newspapers.

#### FLOOR WAX.

[*Bayr. Ind. und Gewerb. Blätter.*]

	Parts.
Ceresin.....	20
Soft paraffin.....	5
Oil of turpentine.....	15
Benzine.....	20

Melt the ceresin and paraffin together and after removing from the fire add the other ingredients.

#### SILVERINE.

[*Pharm. Centralkalle.*]

	Parts.
Precipitated chalk.....	30
Ammonia water.....	30
Alcohol.....	45
Water.....	200

Label "For polishing silver; shake well before using."



### The Vagaries of Modern Pharmacology.\*

The services rendered by chemistry to therapeutics is not an exhausted subject. Certainly our predecessors already possessed a goodly medicinal treasury, but it seems very insignificant when compared with what we now utilize. Chemistry has loaded *materia medica* and pharmacology with wealth; it is the mother of new remedies, and we are proud of its aid; it has given us our anesthetics, antiseptics, hypnotics and antipyretics. These groups of remedies enable us to give relief in many cases where our forefathers were quite helpless. To them chloroform, ether, carbolic acid, iodoform, creosote, chloral, the salicylates, and antipyrin were all alike unknown. But here again, and more so than with respect to the alkaloids, there are shadows in the picture. Chemists and chemical manufacturers add more and more to our store of remedies day by day without stint or truce, without heeding the despairing cries of physicians already overstacked with drugs. We are tempted to cry out for mercy. This is no exaggeration, for these new chemical products are all forced upon the same therapeutic market under the most attractive names, and all proclaimed aloud with the noise of most perfect advertising machinery. This is now done to an extent that, in my opinion, is detrimental to the interests of therapeutics. I am not speaking of quack remedies, the orvietana of our day, of those secret specifics which the medical man views with wholesome horror, to which, and to whose use the old adage, *Trompeurs, Trompes, Trompettes*, can be so well applied. I am speaking of genuine well-known products, for, unfortunately, modern industrial chemistry, in manufacturing and in placing at the disposal of medical men these drugs, does not at all object to their being purchased by the general public. If this be not so why do their proprietors select for their names the fascinating names that act as veritable flags to attract the public—for instance, anti-nervine, antiphthisine, anti-rheumatine, anti-dysenterine, and, most expressive of all, migrainine. I fully appreciate the difficulty of finding new names for these new products, and can understand that the manufacturer would shrink from giving them the names derived from their chemical composition, for these, generally speaking, could only be pronounced with linguistic gymnastics and intolerable strain upon our memory. I must, with great regret, note that we have departed from the ancient method which taught us to denominate new product according to their origin, and have followed freely a course of seeking for euphonious, sonorous names, proclaiming the therapeutic use and effect of the drugs designated by them. It is not sufficient nowadays to have a good remedy—say agathine; we must be assured of its superlative excellence, hence aristol. Do you want to prescribe for a patient who is "out of sorts," you have euphorine; for a lack of appetite, you have orexine. You desire to procure sleep for him: you have hypnal, hypnon, somnal, or somniferine. You wish to lower a febrile temperature: do not let the emergency trouble you, for you have antipyrin, antifebrine, antithermine, therminome, thermofugine, pyrodine, and thermodine. You want to assuage pain? *Eh bien*, you have await-

ing your orders analgesine, analgeine, exalgeine, exodyne, and neurodyne. Or you have to deal with a case of heart disease: you have cardine. Or you desire to stimulate urinary secretion: you have diuretine, pheduretine, and urophaine. To check the formation of pus there is a remedy termed pyoktanine; and to combat spasms antispasmine. I do not wish to exhaust your patience, and I will spare you the enumeration of the antiseptics, the disinfectants, the microbicides *e tutti quanto*. Ten years exactly have elapsed since my honored colleague Professor Rossbach of Jena published an article full of wit and sound sense on these tendencies of modern therapeutics, and in those days we had not the long lists of antiseptic and antipyretic remedies. Nor was it then imagined that the essential extracts of the organs of animals, of which the late Professor Brown-Séquard and M. C. Paul were the earliest to explain the therapeutic value, would find a place in *materia medica*, nor cultures of microbes. It was not foreseen that we should have to chronicle in 1894 the sale not only of séquardine, but also of veritable bacterial products such as tuberculine, tuberculodine, antituberculine, antitoxine, *κ.τ.λ.* How shall we check the fury of this flood? There seems no reason why it should come to an end.

### Mecca Balsam and Myrrh.\*

The southwestern districts of Arabia and the northeastern corner of Africa are characterized by the production of trees yielding aromatic exudations. G. Schweinfurth observes that, although the shrub yielding mecca balsam, *Commiphora opobalsamum*, Engl., is widely distributed over the coast territory of Arabia, the adjacent islands, and southern Nubia, the balsam is collected only in the valleys near Mecca; the plants producing olibanum and myrrh prefer low mountains, 3,000 to 5,000 feet high, and rocky soil. *C. opobalsamum* averages about fifteen feet in height possesses a yellow papery exfoliating bark, and produces long, thin, grayish black twigs, from the ends of which a small quantity of balsam exudes. Although not an eye-witness of its collection, Schweinfurth thinks the balsam must be obtained by crushing and boiling the ends of the twigs, or by pouring boiling water over them. Collection by exudation is out of the question, as only a few centimeters toward the ends of the twigs contain much sap, appear varnishy, and yield when incised minute drops of bright green fluid possessing the characteristic odor of mecca balsam. This is the substance referred to in the Bible under the name of myrrh, an error attributable probably to the similarity of the old Hebrew word "mar" with the late Arabic designation "morr" for the gum resin myrrh. It appears never to have been collected in large quantity; according to information from the principal spice merchant in Cairo, at the present time only a few kilogrammes are annually brought to the market.

Myrrh, according to Schweinfurth, can be yielded only by *C. abyssinica* or *C. schimperi*, and is probably obtained principally from the former, which is widely distributed, and in certain districts abundant. A. Deffers actually collected myrrh from this plant, which was pointed out to him in the Fadhli district east of Aden as the source of the myrrh brought thence in large quantities into commerce, and a specimen of this myrrh was presented by

Schweinfurth to the Pharmaceutical Society of Berlin. The tree is a small one, seldom exceeding 30 feet in height, with a yellow or brown shining papery exfoliating bark. When incised the bark yields abundance of yellowish milky fluid, which solidifies to myrrh. The plant also occurs in northern Abyssinia, but not in such abundance as to offer sufficient inducement to collect the gum-resin; the drug comes probably from the northern districts of Yemen and the mountains of Assir. *Balsamodendron myrrha* (*Hemprichia myrrha*, Nees, Schwf.) yields no myrrh; the plant is completely odorless, and yields no trace of resin when branch or stem is incised. Hemprich noted on his specimen that possibly this species yielded myrrh, but the evidence to that effect was insufficient. Nees v. Eenbeek described the plant, however, as the source of Arabian myrrh, hence the error. *C. schimperi* grows in Yemen, and produces abundance of gum resin closely resembling myrrh. It is also found in Abyssinia, where, however, little or no myrrh is collected from it.

### How to Keep Clippings.

The following method is followed by Dr. Marcus Benjamin, formerly editor of the *American Pharmacist* and now sub-editor of the "Standard Dictionary," who describes it in the *Pharmaceutical Era*:

On the back of each sheet I write two things: First, the subject; second the title of the clipping. Thus, under the general title of nitrogen, I have items about the nitrogen oxides and the nitrogen acids; consequently, I find my sheets read, as for instance:

"Nitrogen—Nitrogen and Electricity" (being a clipping from the *Boston Journal of Chemistry* for January, 1877), and "Nitrogen—preparation of nitric oxide," being a clipping from the *Scientific American* for May 24, 1879. These sheets are all alphabetized under the second title, except as they refer to special subjects. That is to say, I try to keep the items having direct reference to nitrogen as an element together, those having reference to nitric acid together, and so on. In such a matter the personal judgment of the individual must be followed, and in this feature lies the great imperfection of any system. I have separate places for hydrogen, nitrogen and oxygen, but items on liquefaction of gases are sent to gases. This is purely arbitrary, but I see no other way to advise. Again, the subject of sewer gas came into prominence, and for a time I filed the items under gas, but the package grew too bulky, and so I made a new one for sewer gas and sent it to S. It is necessary to exercise arbitrary and special judgment in such matters. I group my metallic mixtures under the general head of alloy, and there are the clippings from brass to type metal, but if I should (as I frequently do) find any one kind of alloy, as brass, for instance, growing too bulky, it would at once be given an independent heading. Alkaloids form another group, but I have a separate heading for opium alkaloids and one for quinine. The reasons are obvious. Cosmetics, under which formulas and notes on hair dyes and face preparations are kept, as well as disinfectants, are necessary groups. It would be impossible to give separate places to the many items otherwise, which, it must be remembered, are all alphabetically arranged, each one on a separate sheet of paper.

At first I used note-size paper, and had sheets cut for me in lots of 500. These I place in folders of heavy brown paper.

\*From an address delivered at the Eleventh International Medical Congress, April 5, 1894, by Prof. J. B. Stokvis, professor of pharmacology in the University of Amsterdam.

\*From a report of the Pharmaceutical Society of Berlin.



A separate folder is devoted to each subject, on the outside of which is written the general title. Thus, in the letter G, I find my titles run as follows: Gallium; gas, illuminating; gas, liquefaction of; gases; gems, diamonds; gems, amber, rubies, etc.; glass, glue, glycerin, gold and gums. These folders are made a little larger than two of the note sheets, and are folded in the center. In this way they are made to hold all of the single sheets. For each letter of the alphabet I have two black cards of thick pasteboard, and between these I place the individual packages. The covers are held over the packages by rubber bands, but as these break and soon wear out, I would recommend in their place a bandage made of cloth tapering to points, where a piece of narrow ribbon or braid is sewed on for use in tying. This bandage system is used by Professor Edward S. Morse of Salem, Mass., for holding pamphlets, and is the best thing for this purpose that I have ever seen. Between the rubber band and the cover I have an envelope on which is written a list of the titles of the packages contained between the boards, so that at a glance the subjects may be seen. This I use as a receptacle for loose items that for the moment I have not time to paste up. Also at the end of each letter there is a folder marked miscellaneous, in which are placed items that, as yet, have no regular folder for themselves.

### Abstracts from the Sixth Edition of Dieterich's Pharmaceutical Manual.\*

#### Wood Stains.

By wood stains are understood solutions of dyes, etc., used for coloring wood. They are fixed on the wood either direct or through the medium of some mordant. In many cases the color is only developed in the grain after the mordant is applied; sometimes the mordant merely changes the tone of the color.

The action of the stain is influenced not only by the mordant but also by the natural constituents of the wood, as tannin for instance. Consequently different woods sometimes give entirely different results with one and the same stain.

All the stains here given have been tried with oak, cherry, white beech, red beech, maple, ash, birch, linden, poplar, fir and pine.

To arrange them in a synoptical manner was by no means easy. I think that practical utility can best be served by designating the mordants and color solutions with letters and figures respectively and combining them in a tabular form under the colors. Following the table are the directions accompanied by a few remarks.

A more definite nomenclature of the colors is impracticable because of the variations of color and tone produced on the different woods. Moreover the age of the wood to be stained and other circumstances enter into the matter of color.

#### MORDANTS.

a. Iron acetate solution, 100 grammes.

The following consist of solutions of the substance and quantity named in 100 parts of water: b. 2 parts of potassium bichromate; c. 1 part of cupric sulphate; and 1 part of potassium chlorate; d. 1 part of barium chloride; e. 1 part of calcium chloride; f. 2 parts of magnesium sulphate; g.  $2\frac{1}{2}$  parts of manganese sulphate; h. 3 parts of chrome alum; i. 1 part of iron

chloride; k. 2 parts of iron sulphate; l. 3 parts of copper sulphate; m. 2 parts of tin chloride; n. 3 parts of alum.

#### COLORING SOLUTIONS.

1. Dissolve 20 parts of logwood extract in 80 of water.

2. Dissolve 10 parts of logwood extract in 90 parts of water.

3. Dissolve 20 parts of aniline chloride in 80 parts of 90 per cent. alcohol.

4. Rub 10 parts of Kassler brown with 80 parts of 10 per cent. ammonia water, put in a bottle and allow to stand corked for 24 hours. Then add 50 parts of water and 10 parts of 90 per cent. alcohol. Allow the mixture to stand for several days and then filter.

5. Boil 5 parts of potassa and 10 parts of Kassler brown with 50 parts of water for about half an hour, cool, add sufficient water to bring up to 90 parts by weight, and then add 10 parts of 90 per cent. alcohol.

6. Triturate carefully 5 parts of alizarin with 100 parts of water and add sufficient ammonia water to make solution smell strongly of ammonia.

7. Mix 1 part of alkannin, 10 parts of alcoholic extract of red sanders, 10 parts of dragon's blood and 180 parts of 90 per cent. alcohol, and filter.

8. Dissolve 5 parts of alcoholic extract of red sanders and ten parts of aloes in 85 parts of 90 per cent. alcohol and 2 parts of 15 per cent. soda solution (sp. gr. 1.17).

9. Dissolve 1 part of gallic acid in 100 parts of water.

10. Dissolve 0.7 parts of water soluble nigrosin in 100 parts of water.

TABLE OF COLORS.

	Black.	Brown.	Red.	Gray.
I.....	$s + a$	4	$\frac{7}{8}$	$9 + k$
II.....	$a + b$	5		10
III.....	$c + 3$	6	$n + 6$	
IV.....		$i, e, f, g, h, k, l, m + c$		

#### DIRECTIONS FOR USING THE ABOVE.

Apply the stain to the wood, allow to dry, and then polish by rubbing linseed oil on the stained surface. If the stain is composed of two fluids first apply the liquid designated first in the table, and when dry apply the second fluid. For instance if the table reads " $c + 3$ " it is understood that the wood is first to be treated with the mordant c and then, after drying, with the coloring solution 3. If the table only says "5," however, no mordant is necessary, and the application of the color solution alone is sufficient, where several letters are given one may choose any one of the liquids so designated. If the figure precedes the letter the color solution is to be applied first, to be followed by the mordant. The precedence as indicated in the table should be closely followed.

#### REMARKS.

The combinations i or k with No. 6 color oak and cherry black. With  $i + 6$  the tone is bluish black, and with  $k + 6$  it is brownish black. The brown produced by No. IV has a more or less violet to reddish tinge on nearly all woods.

#### Infusions and Infusing.

The extraction of vegetable substances with hot water with but a short exposure to heat as it is done in the making of an infusion accomplishes the end, less of dissolving all the water-soluble constituents than of abstracting the volatile, aromatic and I might say sometimes imponderable constituents of the plant.

When we consider what a difference there is in the taste, and correspondingly

in the stimulating effect, of the popular infusions tea and coffee when prepared in different manners, we cannot but realize the necessity for the exercise of the most exact care in the preparation of such infusions as come to us at the prescription counter.

According to the last edition of the German Pharmacopoeia (III) the drug must be heated for five minutes in a closed vessel with the prescribed amount of hot water, allowed to cool and then strained. The seventh edition of the Austrian Pharmacopoeia gives the same directions but supplements the five minutes heating in the water-bath by directing that the infusion stand fifteen minutes.

In order to avoid resort to the regular steam bath every day [in Germany the infusion is very much more used than in America—ED. AMERICAN DRUGGIST] portable water-baths are used at the prescription counter, with one or more infusion mugs, and which are heated by gas, petroleum or alcohol. The water-bath made by E. A. Lentz of Berlin from copper without any soldering is worthy of notice.

The same firm manufactures a rapid infusion apparatus which is of much value for night and for hurry prescriptions. It is made entirely of cast iron and contains a shell which has on top the infusion mug and ends below in a small pan which holds but very little water. Outside of this inner shell is the larger water reservoir which is connected with the small pan by a tube which keeps the water in the pan and that in the reservoir at the same height. On applying heat to the pan the water contained therein soon begins to boil, the steam surrounds the infusion mug and rising passes through the neck of the water reservoir, being there condensed. To fill up as needed the reservoir is provided with a small brass stopper which acts as a safety valve. The apparatus is made either for one or for two infusion mugs.

In the laboratory where larger quantities of infusions are made other methods are generally followed than at the prescription counter. There the parts of the plants which do not yield their virtues readily are, as a rule, submitted to the action of the water for some hours. Occasionally treatment with cold water precedes that with hot water.

### Natural vs. Artificial Oil of Wintergreen.

In the semi-annual report of Schimmel & Co. (Fitzsche Brothers), Leipzig and New York, for April, 1894, we find the following with reference to the introduction of methyl-salicylate into the U. S. Pharmacopoeia.

In a review of the pharmacopoeia in question (*American Journal of Pharmacy*, 23, 1893, 600), G. M. Beringer strongly depreciates the introduction of artificial oil of wintergreen into that work. Now, the reasons which led to the incorporation of the synthetic oil into the materia medica are so apparent, and have been so thoroughly discussed, that it is really superfluous to waste words in mentioning them again. Natural commercial wintergreen oil is habitually adulterated in the grossest and most extensive fashion with petroleum, sassafras oil and other oils. Moreover, by far the greater part of the product known in trade as wintergreen oil is not wintergreen oil at all, but the distillate of the bark of a variety of birch (*Betula lenta*). These facts were doubtless the reason why the authors of the U. S. Pharmacopoeia decided also to include in their work the artificial methyl-salicylate. Mr. Beringer's objection that

\*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

methyl-salicylate, being a chemical product, is liable to be adulterated with other synthetic bodies does not seem to us to be justified.

For the rest we are of opinion that it is easier to detect adulterations in a uniform chemical body than in an essential oil. This is probably the general view of the matter.

We cannot agree with Mr. Beringer's opinion that the reason for the introduction of the synthetic product into the pharmacopoeia was its cheapness compared with the natural oil. In our opinion the pharmacopoeia-commission has been guided in its decision simply by scientific considerations, which are, of course, the only right ones.

## Medical Notes.

**Toxicity of Antiseptics.**—Désesquelle and Charrin have compared the toxicity and bactericidal power of a number of recently introduced bodies derived from corrosive sublimate, by the replacement of an equivalent of chlorine by equivalents of various phenols and naphthols. The results are represented in the following table, the antiseptic and bactericidal power of sublimate itself being taken as one hundred:

Antisepticity. Toxicity.	
Phenol sublimate.....	104 12.5
Mercury hydroxy-phenolate.....	46 16
Phenol acetate mixed with Hg..	41 16
Naphthol sublimate.....	32 27
Mercury beta-naphtholate.....	61 25
Mercury acetate.....	50 45

Though the differences in antiseptic power are very marked, the variation in toxicity is evidently much greater (*Nouv. rem., through Pharm. Journ.*).

**A New Treatment for Diphtheria.**—Blanchini (*Gazz. degli Ospitali*, March 20, 1894) describes a method of treating diphtheria which consists in the local application to the neck of the patient of fomentations moistened with a 2 per cent. solution of carbolic acid in lead lotion, these being applied at as early a stage as possible, with the idea of acting on the micro-organisms of the local lesions, and thus preventing their further spread. Application in this way secures the absorption of the phenol, both through the skin, which appears to be easy in the case of children, and also in the form of vapor through the mouth. This has been supplemented in the most serious cases by painting the pharynx, etc., with the following pigment: Salicylic acid, 3 grammes; absolute alcohol, 20 grammes; resorcin, 2 grammes; glycerin, 10 grammes; to be applied two or three times daily. The result has been very satisfactory; out of forty-five cases of varying severity, there were only two deaths, the duration of treatment varying from six to eighteen days on an average, but in one case being as long as thirty days. To these forty-five cases are appended notes of nine others treated by other practitioners in every case successfully.

**Picric Acid in Treatment of Burns.**—For some time past the treatment of burns by picric acid has been in use at the Charity Hospital, Paris, apparently with success. Dr. Thiéry, who introduced it there, follows the simple method originated by M. Filleul. This consists in applying lint saturated in a solution of about  $\frac{1}{2}$  per cent. of picric acid solution to the injured surface, the dressing being well wrung out before being applied. In ordinary cases the dressing need only be changed every three days, and afterward every four or five days; it is considered

preferable to allow the dressing to dry at leisure without covering it with mackintosh. Picric acid has a marked anæsthetic action on burns, in addition to its antiseptic and healing properties. There is no danger from erysipelas by its use, and no irritation of the skin is occasioned. A great drawback, however, is that a lasting yellow patch is apt to appear on the place where the picric acid has been applied.

**The Injection and Congelation of Oil for the Control of Muscular Spasm.**—Corning (*New York Medical Journal*, No. 802, p. 449) proposes for the control of troublesome muscular spasm the injection into the affected muscles of an oily substance having a solidification-point a little above the temperature of the body. The method was successfully employed in one case of violent clonic spasm of the splenius capitis muscle. The injected fluid consisted of oil of theobroma to which a sufficient amount of paraffin was added. The injection was made by means of a large syringe, armed with a stout, hollow needle, 800 minims of the fluid being used. It is recommended that the injection be made while the muscle is extended, even though it be necessary to administer an anæsthetic for the purpose. The oil should be distributed as well as possible throughout the affected muscle. After the oil, made liquid by warming, has been injected, it is hardened by the application of an ether-spray or an ice-bag. Too much should not be attempted at one sitting. Supplementary injections may be made after the first at intervals of three or four days.

**Medical expert testimony** has inexhaustible interest as a reform topic. The uses and abuses of this kind of proof continue to engage the earnest attention of medico-legal writers. As in the case of some of those chronic ailments of the human race so familiar to medical practitioners as clinical proptosis, the number of remedies suggested attests the difficulty of the treatment; so in the present instance, every year calls out a new panacea for a disorder about the diagnosis of which there is substantial unanimity among physicians. One of the latest suggestions relative to the employment of experts comes from Dr. L. C. Gray of New York, and evidently had its source in a very extensive personal experience in court proceedings. Dr. Gray's remedy takes a double form: (1) the selection of medical men by the presiding judge to sit on the bench with him in an advisory capacity in trials which do not need juries; and (2) a conference of all the medical men in cases tried by a jury. The former plan has its analogy in the use of assessors in the English admiralty courts. The latter method, in the author's opinion, would bring about substantial agreement among the medical witnesses with reference to facts and objective conditions, although conclusions therefrom, diagnostic and prognostic, might differ. To the objection that the system of medical assessors and medical conferences here urged is opposed to the principles of our law, Dr. Gray courageously answers that if that be so 'the principles of our law are radically faulty'; and again, "a law that ceases to be the embodiment of common-sense has outlived its usefulness and ought to be superseded."—*Boston Med. and Surg. Journal*.

**Potassium Bichromate in Dyspepsia.**—Dr. Thomas R. Fraser, of Edinburgh, communicated to the International Medical Congress at Rome an interesting paper on the value of bichromate of potassium as a remedy in gastric affections. He says that "having treated in 1884 with

gratifying success a case of persistent gastric disorder by the administration of small doses of bichromate of potassium, I have since that time administered it in a large number of cases. The results have been so favorable that I feel myself justified in now stating my opinion of the therapeutic value of this substance and in briefly recording a number of the cases of gastric disorder in which it was used by me." He records 28 cases divided into two groups, under "dyspepsia" and "gastric ulcer." The doses ranged from  $\frac{1}{4}$  gr. to  $\frac{1}{2}$  gr. thrice daily, the smaller dose being found sufficient in the majority of the cases. The dose is given fasting and in as empty a condition of the stomach as possible and administered either in the form of pill or solution. Dr. Fraser says "an examination of these records shows that bichromate of potassium is capable of relieving, and often in a short time of removing, the entire group of symptoms—if we except constipation and anæmia—encountered in dyspepsia and especially pain, nausea, vomiting, and gastric tenderness." Bichromate of potassium possesses a strong anti-putrefactive power, and this action probably constitutes one of the causes of its anti-dyspeptic therapeutical value, but there are undoubtedly other causes, such as a direct or indirect analgesic action, and probably a selective action on the nutrition or function of certain histological structures, which Dr. Fraser is now engaged in endeavoring to determine.

## Therapeutic Indication of Cocaine in Presence of Heart Disease.

Dr. Mangano (*La Med. Contemp.*) concludes from his investigations that (1) in suitable doses and with careful watching the use of cocaine is never contraindicated for local anesthesia. (2) That as an anodyne it is unsafe and that it is particularly dangerous in heart disease. (3) The indications for its use in nervous affections are very circumscribed and is not at all to be commended in heart affections. (4) As an antidote when it has once been absorbed subcutaneous injections of caffeine (internal exhibition is less effective) are recommended. The antidote should be administered in proportion to the severity of the toxic symptoms. He has administered it in the form of benzoate of caffeine, having occasionally given as high as 3.5 grammes (52 grains) without observing any untoward symptoms from the antidote.

## Inhalation of Calomel Fumes for Diphtheria.

Dr. Job Corwin of Brooklyn first proposed the inhalation of calomel fumes for diphtheria in 1881. Dr. Dillon Brown again calls attention to the subject in a paper read before the Metropolitan Medical Society. He proceeds as follows: Place an alcohol lamp in any suitable vessel, across the top of which lay a strip of sheet iron; on this place 15 or 20 grains of calomel at a time, and place under a small tent formed of a bed sheet, with the patient. Children should first be accustomed to the tent before any effort is made to begin the sublimation.

In all cases of diphtheria it is well to sublime 20 grains of calomel three times daily as a prophylactic against laryngeal invasion. As soon as laryngeal symptoms present themselves 15 grains should be sublimed every one, two, or three hours, according to the progress of the disease.

It ought to take from eight to ten minutes to sublime 15 grains. If the symptoms grow worse rapidly the frequency and size of the dose should be increased until at least 60 grains are used every hour. In spite of this a certain number of cases will require operative interference; but after the intubation or tracheotomy the fumigation should be continued, using for the first three days from 15 to 40 grains every hour and gradually decreasing the size and frequency of the dose, according to the indications. This must necessarily be, to a great extent, a matter of judgment and experience; but the average case that recovers will receive 20 grains by fumigation every hour for three days, and the interval will be increased one hour every day for the next three days, when it is stopped or used once or twice daily as a prophylactic, if membrane persists in the nose or pharynx. If in doubt as to what amount to use, the larger dose should always be used. In many cases over 2 000 grains have been used during the course of the disease, and the patient has recovered with few or no bad symptoms. In one case from 80 to 40 grains were used every hour for six days (making a total of nearly 5,000 grains). The child was not affected, except by a very slight stomatitis and some weakness and anemia.

It is to be remembered that the dose is determined, not by the amount of calomel which is sublimed but by the amount which is inhaled; therefore, even more important than the number of grains of calomel used and the rapidity of the sublimation is the size of the tent and the density of the fumes which fill the tent.

The following precautions should be observed:

1. The nurses and attendants should be warned against inhaling the fumes.
2. The child's skin should be covered, so that the full effect of the fumes may be confined as much as possible to the local deposit on the mucous membrane.
3. Before each sublimation the child should be given a small dose of whisky.
4. After each sublimation the mouth, gums, and teeth should be cleaned with a weak solution of potassium chlorate, and if the gums become sensitive they should be sponged three times a day with a mixture of equal parts of tinct. myrrh, tinct. nuc. gall., and tinct. ratanhiæ. All the re-deposited calomel should be wiped up from the furniture, etc., and the room well ventilated.
5. If the prostration and anæmia seem to be greater than the local manifestations would account for, the amount and frequency of the calomel should be diminished and the stimulants increased.
6. If the nasal passages are not infected, it may be wise, especially in older children who are taking very large doses, to cut off the fumes from the nose with a loose plug of cotton or ramie in each nostril.
7. It is very important to use pure calomel that has been washed free from all irritating impurities.

## Bibliography.

PROCEEDINGS OF THE AMERICAN PHARMACEUTICAL ASSOCIATION at the forty-first annual meeting held at Chicago, Ill., August, 1893, also the Constitution, By-Laws and Roll of Members. Philadelphia: Published by the American Pharmaceutical Association. 1893. 8vo, pp. xviii and 1087.

The issuance of this work was referred to editorially in our issue of May 10. We supplement this with a review of the salient features of the volume. While the re-

port of the Chicago meeting contained therein is of some interest, it contains nothing of value which has not already been given to our readers in the columns of this journal. The chief value of the volume lies in its "Report on the Progress of Pharmacy."

The arrangement of the "Report on the Progress of Pharmacy" is quite different from that of previous reports. The reporter has so systematized the work that he has been able in an introductory to arrange an index of headings. The titles are specific and clearly indicate the contents under all the headings so that facility in consulting the report is assured. Under Pharmacy we notice a new innovation in a department of "Prescription Difficulties." This if continued in subsequent reports, will be a thing of great value to the pharmacist. The proceedings of all the State pharmaceutical associations are grouped together. A review of some of the more important papers is given, with references to their publication in the current pharmaceutical journals. A perusal of this part indicates quite well the progress of pharmacy in the different States of the United States. It is highly gratifying to note that so many States are doing such excellent work.

The grouping together of new remedies in a class by themselves is a great improvement. It is evidently the idea of the reporter to make this work of great practical value to the pharmacist. Under the heading of "General" under pharmacy is included: statistics, educational matter, pharmacy at home and abroad, pharmacopœias, metrology, dispensing, physician and pharmacist, poisons, legislation, proprietaries, proprietors, clerks, women, dispensaries, advertising, miscellaneous (cements, glass, ink, etc.), soda water, adulterations and rubber goods. There is a storehouse of reference here.

It probably would be inadvisable to make extensive reviews of these subjects. The value of the reference alone is sufficient as it affords the pharmacist who is seeking new fields for advertising, or who is renewing his soda water stock, a knowledge of where the information is as the current pharmaceutical journals are easily procurable. Under the department of pharmacy are also grouped medicinal subjects of interest to pharmacists, urine and urinary analysis, bacteriology and ferments, microscopy and pharmacognosy. The arrangement of the matter is exceedingly well done, as may be seen under "Bacteriology." The first reference is to bacteriology for pharmacists, giving reference to an account of apparatus necessary for the practical work for the pharmacist. Then follows bacteriological chemistry, structure of bacteria, tests for bacteria, staining fluids and operations, apparatus for cultures, etc., and finally a consideration of the work on the bacteria in water, and the different kinds upon which special work has been performed during the past year.

In the department of "Vegetable Materia Medica and Botany" the reporter has introduced several new departments, the most important one being the consideration of plant constituents. The reporter has separated Chemistry into three departments: "Inorganic and Physics," "Chemistry of the Carbon Compounds" and "Applied Chemistry." Under Inorganic and Physics in the general and theoretical sub-department he has placed besides all matter relating to these subjects, analytical chemistry, alkalimetry and acidimetry. The inorganic acids are arranged alphabetically as are all of the elements. The reporter uses the Latin or

English names of the elements more commonly employed. It might have been better to have adopted the Latin terms altogether. Still the convenience of referring to copper, gold, lead, mercury, instead of cuprum, plumbum, etc., may be considered more desirable. This is, however, a matter of training largely. This same question will not be raised when on coming to the organic part we find the organic acids arranged alphabetically, and likewise the alkaloids, the ethereal, fixed and mineral oils. Under "Applied Chemistry" is arranged an epitome of the work on albuminoids, butter, food, milk, peptone, proteids, water, etc. Then follows a page devoted to the names with date of birth and death of prominent pharmacists, botanists and chemists that have died during the past year. Following this is a bibliography that is the most exhaustive that has ever been prepared for the "Proceedings of the American Pharmaceutical Association."

As we have already stated editorially the work reflects much credit upon Mr. Kraemer the reporter and places the report easily at the head of such works of review and reference.

DAS FABRIKATION DER ERDFARBEN. Enthaltend Beschreibung aller natürlich vorkommenden Erdfarben, deren Gewinnung und Zureitung. Handbuch für Farben-Fabrikanten, Maler-Zimmer Maler, Anstreicher und Farb-Warren-Handler. Von Dr. Joseph Bersch. Mit 19 Abbildungen. Zweite sehr vermehrte Auflage. Wien: Pest: Leipzig: A. Harteleben's Verlag-1893.\*

The literature of paints and paint making is not nearly so full nor so accurate as it might be, and the revision which this work has received makes it a distinct addition. The feature of the work which most commends itself on a cursory examination is its practical character, which will render it of value to the practical manufacturer of paints of the kinds treated of.

PROCEEDINGS OF THE NEW HAMPSHIRE PHARMACEUTICAL ASSOCIATION at the twentieth annual meeting held at Isles of Shoals, September 5 and 6, 1893.

This volume contains an interesting report on the progress of pharmacy, from the pen of C. Milan Morse of Nashua. The president's address and secretary's report contain much of interest to pharmacists generally, but will be valued chiefly by the members of the association. The officers of the association are: Albert S. Wetherell, president, Exeter; Charles B. Spofford, vice-president, Claremont; Andrew P. Preston, vice-president, Portsmouth; Frank L. Way, secretary, Manchester; Amasa D. Smith, Ph.C., treasurer, Manchester; William P. Underhill, auditor, Concord.

Part VIII of Charaka-Samhita, an English translation of an ancient Sanscrit work on Medicine, to which reference has been made in previous numbers of this journal, has just been issued by the translator and publisher, Avinash Chandra Kaviratna, 200 Cornwallis Street, Calcutta. It contains many curious and valuable facts pertaining to the ancient practice of medicine by Hindu sages, and must be regarded as a valuable contribution to the native literature of India. The publisher offers to send the complete work, postpaid to subscribers in the United States, for \$15.

\*The manufacture of the earth colors, including the description of all earthy pigments occurring naturally, and the method of obtaining and preparing them. A handbook for color-makers, painters, etc. By Dr. Joseph Bersch. Vienna, Pest and Leipzig. Published by A. Harteleben

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Benzoinol.** J. M. A.—This is a highly purified preparation of liquid petrolatum containing benzoïn in some form. It is a proprietary preparation and the title is copyrighted. We are preparing a list of the kind mentioned in your note which will appear shortly.

**Paskola.** M. A. D.—We are unable to give you any information regarding this compound.

**Explosive Mixture.**—R. A. L. says the mixture described below decomposed with violence while he was grinding the first-two ingredients.

Tannic acid.....	3 drams
Potassium chlorate.....	3 drams
Glycerin.....	4 drachms
Tincture of aconite.....	1 dram
Water.....	8 fl. ounces

This will always happen as potassium chlorate and tannic acid combine with violence when forcibly triturated. Our correspondent should have dissolved the two substances in separate portions of water, mixed them and then added the other ingredients to the mixture.

**Simmons' Liver Regulator.** D. E. S.—This is understood to have the following composition, viz.:

Hepatica.....	1 ounce
Leptandra.....	1 ounce
Serpentaria.....	1 ounce
Senna.....	1/4 ounces

**Mix.** Put the ingredients into 2 1/2 pints of boiling water, let stand 18 hours, then strain. Add 1/2 pint of good whisky.

**Cleansing Liquid.**—C. L. M. & Co. requests a formula for a fluid for cleaning gloves, clothing, etc. The formula given below may be used for the purposes indicated:

Castile soap in shavings.....	4 drams
Carbonate of soda.....	3 drams
Borax.....	1 dram
Benzine.....	1 fl. ounce
Strong solution of ammonia.....	1 fl. ounce
Distilled water.....	1 pint

Boil the soap in the water and add the borax and soda, and, when quite cold, the ammonia and benzine. Shake well before using.

**To Transfer Gold Leaf to Wood.**—F. T. L. writes: "Please publish the formula of a solution used to transfer gold leaf to wood by heat. Our cigar box manufacturers use it in printing boxes. They coat the wood with the solution and let it dry. It only becomes sticky or gummy upon the addition of heat at the time of transferring the gold."

Wood which is neither too hard nor too soft may be lettered as follows: The surface must be smoothed. Size by rubbing over a little flour paste, wipe off the paste so that only a trace remains. Then apply glaire (white of egg with a little water added), cover the surface thoroughly, rubbing in with a brush if necessary. Allow the glaire to dry thoroughly then apply the gold leaf. Have the brass stamp or the type hot enough to hiss when touched with a wet sponge. Press the type firmly into the wood. Remove the gold not secured by the heated die or type with

a wet sponge rubber; our correspondent is hardly correct when he calls it "transferring." There is a great knack in applying gold leaf properly, especially in taking the waste with a rubber.

**Wall Paper Cleaner.** M. B.—We do not know the composition of the "Magic Wall Paper Cleaner." If not very dirty the paper of any room will be much improved by brushing it over in straight lines with a soft broom covered with a clean, soft cloth; if, however, the paper be much soiled, very stale bread is the best thing to clean it with. Cut a very stale loaf into slices, and in the lightest manner possible wipe the paper with it in a downward direction.

A compound much in vogue for cleaning wall paper is made as follows: Mix together one pound each of rye flour and white flour into a dough, which is partially cooked and the crust removed. To this 1 ounce of common salt and 1/2 ounce of powdered naphthaline are added, and finally 1 ounce of corn meal and 1/2 ounce of Venetian red or burnt umber. The composition is formed into a mass of the proper size, to be grasped by the hand, and in use it should be drawn in one direction over the surface to be cleaned.

**Liquid Bluing.** C. L. M. & Co.—We published desirable formulas for liquid bluing in our issue of April 12 (page 193). The bluing most commonly employed is made by dissolving Prussian blue in a weak solution of oxalic acid, say 6 drams of Prussian blue and 2 drams of oxalic acid to 1 pint of water.

**Chewing Gum.** F. L. M.—The chewing gums in greatest vogue have chicle for a base. We published a reference to the manufacture of chewing gums from chicle in our issue of September 8, 1898, page 199. The "Scientific American Cyclopaedia of Receipts" gives the following formula:

Balsam tolu.....	4 ounces
White resin.....	16 ounces
Sheep suet.....	1/4 ounces

Melt the above ingredients and take

Of the mixture.....	2 ounces
White sugar.....	1 ounce
Oatmeal.....	3 ounces

Soften and mix on a water bath. Roll the pieces in finely powdered sugar or flour to form sticks, etc., as desired.

## Quiz Box.

*This series of questions will be continued each week. The answers to each series of questions will appear in this issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.*

*Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.*

*Address Editor Quiz Box, 37 College place, New York.*

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixira" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

## Answers to Questions; Seventh Series.

81. Desiccation indicates the act of making dry; the removal of the watery portion of a substance by chemical means or by the use of air and heat. It generally has reference to the removal of water not chemically combined. Most vegetable drugs are prepared and preserved by desiccation; stramonium leaves and root of hydrastis.

82. Exsiccation, in meaning and ordinary use, does not differ essentially from desiccation; they both indicate the removal of moisture but, as a rule, exsiccation has reference to a more energetic method of accomplishing the result, such as higher temperature, etc. Thus, exsiccated alum and exsiccated ferrous sulphate are prepared by heating the respective chemicals to a temperature of about 300°, thus expelling the water of crystallization. It would be better to restrict the use of the term exsiccation to indicate this effect.

83. Fusion. The act of melting, or the state of being melted, by heat. Thus, when phosphate of ammo. and soda is gently heated it melts in its own water of crystallization; this is *aqueous* fusion; if further and strongly heated, after all water has been liberated, it melts to a clear glass; this is *igneous* fusion.

84. The element oxygen combines with all the other elements except fluorine, and this combination with an element or group of elements is called oxidation. We oxidize the ethyl of ethylic alcohol (common alcohol) by the use of sulphuric acid and obtain the oxide of ethyl, incorrectly called sulphuric ether.

Sulphur, when burned, oxidizes to sulphur dioxide; this oxide, dissolved in water, yields sulphurous acid.

85. Vaporize alcohol or water and condense the vapor; the product will still be what we started with, alcohol or water. In other words we have not destroyed the compound by distilling it. If, however, we attempt to distill wood, resin or coal we shall obtain a series of products, some gaseous, some liquid, and others solid, but there will be no wood, resin, or coal remaining, and by no possible process can we ever recover the substances we started with. This breaking up of an organic body into new compounds, by heat, is called destructive distillation. Thus, when wood is heated to redness in an iron retort, water, tar, naphtha, pyroligneous acid, gases, etc., distill over, charcoal remaining in the retort.

86. Sublimation is the process of volatilizing solid substances, and again condensing them to the solid form, unchanged chemically. Thus sulphur, camphor, iodine and corrosive sublimate are separated from their impurities by heating the mixture containing them and condensing their vapors as they are given off.

87. Lixivation. The process of dissolving out or extracting the saline matter of bodies by means of digestion in water. When the ashes of plants are percolated with or steeped in water or other solvents the soluble portions are dissolved and the solution thus obtained may, by evaporation, be made to yield the dissolved matter. In olden times the lye used for



soap making was thus obtained by the percolation of wood ashes. If this lye is evaporated and the residue heated to fusion we obtain the crude potash of commerce. Among the medicinal chemicals obtained by lixiviation are potassium carbonate from the ash of land plants and iodine from the ash of salt water plants.

88. When a solid is broken up into particles of different size and placed in a liquid the largest particles first settle to the bottom and the smallest particles are last to sink. By pouring off the liquid at different intervals we can thus separate the material into many different grades of fineness. If the material is a mixture of substances having different specific gravities (a mixture of powdered chalk and powdered flint) we may also employ this method to separate one of the substances from the other. This method of purifying and separating is called elutriation and is called into use in making whiting and prepared chalk.

89. Triturate means to rub or grind to powder. We triturate by the rotary motion of the pestle in the mortar; but if we lift the pestle and bring it down forcibly upon the contents of the mortar it is not trituration but contusion. We triturate the various constituents together in making Dover's powder and the various tablet and other triturations.

90. Contusion, like trituration, may produce powders, but the result is accomplished by a series of blows or pressures. Contusion is more generally resorted to as a preliminary to trituration or in softening a tissue to render it more capable of being acted upon by liquids. In making decoctions and infusions of firm tissues, wood, bark, roots, etc., we very often bruise or contuse the material before applying the liquid, as in making infusion of senega and compound decoction of sarsaparilla.

### Names of Students Whose Grade Stood 75 on the Seventh Series.

W. J. Adams, Manchester. E. Q. Anewalt, Philadelphia.

E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. G. W. Barksdale, Richmond, Va. J. C. Boyer, Wisconsin, Pa. W. E. Bruce, Boston, Mass. T. M. Broadus, Gordonsville, Va. William Brown, New York City. T. H. Brennehan, Harrisonburg, Va. Roscoe Brown, Oxford, Pa.

Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Chas. L. Chapple, Minneapolis, Minn.

J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp, Mount Morris, N. Y. T. J. Derrberry, Centerville, Tenn. Edward F. Deen, Lancaster, Pa.

H. J. Force, Newark, N. J.

William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Housack Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavallo, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn. W. B. Nethery, Toronto Junction, Ont.

Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S. M. E. Read, Waukeon, Ohio.

Aber V. Smith, Clarksburg, W. Va. Clarence O. Snavey, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T. Albany. W. E. Smurl, Parsons, Pa. W. A. Sichel, Snow Shoe, Pa. W. W. Scott, Highland Falls, N. Y. W. Scallin, Mitchell, S. Dak.

Lou Taylor, Greenfield, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.

W. H. Van Strander, Winsted, Conn.

Bertie Ward, Orange, N. J. Miss Emma A. Wiggir, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne Rochester, N. Y.

### Questions; Tenth Series.

#### METROLOGY.

References: Oldberg's "Weights, Measures and Specific Gravity," Remington's Pharmacy, Heebner's Manual of Pharmacy, Oldberg's Home Study of Pharmacy.

111. What is the basis for the metric system, how was it derived and when and how determined?

112. Name the different units of the metric system and give their relation to those in general use in this country.

113. What is the relation of the imperial pint to the liter?

114. How should formulas which direct "parts" be understood; give a practical illustration.

115. How much would 18 fluid ounces of chloroform weigh in grammes?

116. How many minims would 75 grains of an equal mixture of glycerin and alcohol make?

117. How many fluid ounces of alcohol are contained in a kilogramme?

118. How much does a Winchester quart contain?

119. Give the interior dimensions for a cubical vat to contain fifty gallons.

120. How much would 5 pounds (avoir-du-pois) of a mixture of equal parts of ether and glycerin measure?

### Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the American Druggist and Pharmaceutical Record.*

### Advertising Circulars.

By WALTER S. MURPHY.

The pharmacist is deluged by advertising matter free of charge. Every year he receives two or three packing cases full of almanacs made up of fulsome laudations of some patent medicine of whose virtues and composition he knows nothing whatever. He is allowed, however, to distribute this advertising matter without any prospective return for his labors other than that of the privilege of selling for 60c. an article that costs him 86½c. plus the freight.

This thing was started years ago when the pharmacist could make a good profit on sales of the nostrums so advertised; when the price had not been cut into by the cutters of all kinds either in or out of the drug business. Now that the practice of cutting has become so general, however, the margin of profit which can be depended upon in these sales is so small that it is not sufficient to remunerate the pharmacist for the trouble of distributing the advertising matter.

In considering this question it will be observed that it is dealt with wholly from a commercial standpoint. From an ethical standpoint also it is very readily apparent that the pharmacist should not lend himself to advertising something of which he knows nothing, as he thus practically indorses the article by sending out an advertisement of it with his name attached.

The question of newspaper advertising has occupied the major portion of the attention of the writers in your most

valuable series, but I think that in many cases the use of circulars is very much more remunerative than is ordinary newspaper advertising. One of the difficulties contended with by the druggist in those sections in which circular advertising is the most valuable is the lack of good typographical facilities. When Polonius said to Laertes:

*Costly your habits as your purse can buy,  
But not expressed in fancy, for the dress oft bespeaks the man,*

he showed a profound insight into the character of mankind.

The externals in advertising are the dress, and the patron is prone to judge of the character of the advertiser by the nature of the advertisement which meets his eye. A country friend of mine sent me some time ago some very well worded circulars which he had found to prove valuable for advertising some of his own preparations in a Pennsylvania town of 8,000 inhabitants. While the matter in these circulars was good the manner of their printing was decidedly poor. The mere fact that good results had followed their distribution did not by any means indicate that the matter of display and the presswork was of no importance, for I am convinced from my own experience that the same matter presented in a more elegant form would have produced much more satisfactory results.

I find that a fair quality of paper, good display and artistic presswork are very good investments, although they cost considerably more than work that is cheap both in price and quality. A New York friend of mine issues for his own business a little monthly paper, the reading matter of which is such as would interest the entire family. He secures enough advertisements from others who are in his immediate vicinity in lines that do not compete with his own to very much lessen the cost of the advertisement to him, and has come to firmly believe in periodical advertising in this manner.

While from my standpoint this periodical is really a circular, it has not that cheap air about it which pervades a single sheet, and it is of a character which insures its preservation. The items in it interesting one person causes him to hand it to another and in this way reach a much larger number of readers than a mere single page circular would.

### Some Specimen Circulars.

We are in receipt from time to time of numerous circulars which show that many retail druggists appreciate as much as does Mr. Murphy the necessity of care in the preparation and printing of their circulars. Some of the most attractive circulars that we receive are those of Richard H. Lackey, of Philadelphia. It is his custom to celebrate the anniversary of his coming into possession of the store. On this occasion he decorates the store handsomely, distributes appropriate souvenirs and precedes this by sending out very handsomely printed circulars, and an example of the general style of these is given on another column.

This circular is printed on paper of very high finish, the outside measurement of the page being 8¾ x 6 inches and the actual type measurement being 1¾ x 4 inches. In reproducing to suit our columns we have lost much of the excellent effect of the original.

Another enterprising advertiser is Mr. Rowliniski, of Savannah, who sends out to each physician of the city a little circular under the title of "The Prescription." The original is printed on the front of a four



page sheet of fine Irish linen paper of note size. In it attention is called to various articles intended for prescription purposes.

(1st Page.)

**FIVE YEARS** at Lehigh Avenue  
and Fifth Street

**Wooden Anniversary**

OF  
**LAGKEY'S PHARMACY.**

(2d Page.)

*In accordance with our custom we will celebrate our*

**ANNIVERSARY**  
On Friday and Saturday,

November 17th and 18th.

*... In appreciation of the many favors and kindnesses of our friends we will, as usual, distribute appropriate Souvenirs of the occasion to the Ladies and Children, and decorate the*

(3d Page.)

*Store for the event. We hope all our friends will make an effort to come and feel at home, without being called upon to buy.*

*Thanking you for your patronage of the past five years, and hoping to retain a continuance of the same, I remain,  
Very Respectfully,*

**RICHARD H. LAGKEY.**

(4th Page.)

1888



1893

Another very enterprising firm are H. Hay & Son of Portland, Me., who have, as many of our readers will remember, a three cornered store. They have issued a cardboard folder, which, when folded, is just the shape of their store. In one corner of this they have the legend "A well equipped prescription counter here," in an other "Toilet requisites and perfumes here," and in the third "A thirst-slaking soda fountain here." The title of the folder is "Contents of a three-cornered store."

#### **PRESCRIPTION DEPARTMENT.**

To this, the primary function of any 1st pharmacy, the filling of physicians' commands, we devote our greatest energy. In any line **BEST IS** there is a "good enough sort" of material, **NONE** then there is a selected, superior grade. **TOO** This better grade we strive to furnish. We **GOOD** have all the little helps for the sick room that make lighter that discomfort.

#### **TOILET ACCESSORIES**

"**PRE-** Are quite as essential for the 1st **VENTION** preservation of health as medi- **CORNER** cine for the sick. We have about all that is **BETTER** desirable in the way of Brushes, Combs, **TEAN** Sponges, Soaps, Toilet Waters, Perfumes, **CURE** Tourists' Comforts and Manicure Goods. A line of Standard Family Remedies for Seashore or Mount ains.

#### **SODA**

**ASA** With sound, ripe fruit as its 3rd **FALAT-** flavor, fresh, rich cream, all well **ABLE** iced, furnishes a beverage alike palatable **LUXURY** and healthful. Such is our Soda, served in some forty flavors.

#### **PHOTOGRAPHIC SUPPLIES**

**SOUV-** Also furnish a feature of interest **ETWEEN** NIES OF to many nowadays. We have the **THE** **COM-** plates, paper, chemicals, cameras, **WERS** **AND** and, in fact, about everything you will need, **ELSE-** including any information we are able to **WHERE** impart for your benefit.

#### **PAINTS**

For your summer cottage, boats or carriages are also part of our stock.

We can supply you equally well by mail and express from any of our departments (Soda Water excepted) if you are not in easy access to our store.

High grade and low prices tell the story.

Inside of the folder the several department are described as follows, the whole following the outline of the card, the heavy-faced side headings being clear of the body of the type in the margin: The blank cover of the folder is under the heading "Outside of the three corners of Hay's pharmacy these places may be of interest," are given the names of a number of places in the vicinity and their distance in miles.

We trust that the mention of these circulars will prove of assistance to our readers and that others who have devised what have proven to be profitable advertising circulars will send us specimens for future reference.

#### **A New York Section of the Society of Chemical Industry.**

In furtherance of the proposition to establish a New York section of the Society of Chemical Industry, a meeting of the resident members was held at the New York College of Pharmacy on Tuesday evening, May 15. Many were present and signed a petition to the council requesting permission to form a local section.

Below is a list of the members resident in and around New York City:

#### **LOCAL MEMBERS OF THE SOCIETY OF CHEMICAL INDUSTRY.**

Adrian, John S., 331 Broadway, N. Y. City.  
Archibald, Dr. George, 121-123 Front street, N. Y. City.  
Austen, Prof. Peter T., 876 President street, Brooklyn, N. Y.  
Alaberg, W., P. O. Box 2437, N. Y. City.  
Banks, John H., 104 John street, N. Y. City.  
Bell, Percy Carter, 13 Park row, N. Y. City.  
Benjamin, Dr. M., c-o D. Appleton & Co., 1 Bond street, N. Y. City.  
Brenemann, Dr. A. A., 97 Water street, N. Y. City.  
Briggs, T. Lynton, 357 Madison street, Brooklyn, N. Y.  
Bruckmann, G. T., 192 18th street, Brooklyn, N. Y.  
Campbell, John, 118 Warren street, N. Y. City.  
Cawley, J., 78 Passaic street, Newark, N. J.  
Church, E. Ihu D., Jun., c-o Church & Co., 36 Ash street, Brooklyn, N. Y.  
Chandler, Dr. C., School of Mines, Columbia College, N. Y. City.

Clark, Franklyn S., 527 Madison avenue, N. Y. City.  
Cogswell, W. B., Syracuse, N. Y.  
Comer, H., 1 Broadway, N. Y. City.  
Crumble, W. D., 146 Washington street, East Orange, N. J.  
Davis, Herbert J., 255 West 71st street, N. Y. City.  
Dickerson, E. N., 15 Wall street, N. Y. City.  
Ditrich, Julius C., Ozone Mfg. Co., 47 Liberty street, N. Y. City.  
Elliott, Dr. A. H., Consolidated Gas Co., 4 Irving place, N. Y. City.  
Endemann, Dr. H., 25-27 William street, N. Y. City.  
Fries, Dr. Harold H., 93 Reade street, N. Y. City.  
Geisler, Dr. Joseph F., N. Y. Mercantile Exchange, 6 Harrison street, N. Y. City.  
Glatz, Jos., Riverside Chemical Works, 485-493 Kent avenue, Brooklyn, N. Y.  
Goldschmidt, Dr. S. A., 41-51 Sedgwick street, Brooklyn, N. Y.  
Habirshaw, W. M., 150 Front street, N. Y. City.  
Harmon, L. E., c-o E. Ellsworth & Co., 71 Park place, N. Y. City.  
Hartford, Jas., 3 Cedar street, N. Y. City.  
Hartley, Edw., 62 Wall street, N. Y. City.  
Hinman, Bertrand C., c-o Iracled Mfg. Co., 126 Cook street, Brooklyn, N. Y.  
Hunt, F. F., 77 Pine street, N. Y. City.  
Johnston, W. A., The S. S. White Dental Co., Princeton Bay, N. Y.  
Klipstein, A., 121 Pearl street, N. Y. City.  
Krause, O. H., Box L, Jersey City, N. J.  
Lassing, H., M. D., 19 Park Place, N. Y. City.  
Lineff, A. L., 51 Tribune Building, N. Y. City.  
Love, Dr. E. G., 80 East 55th street, N. Y. City.  
McGeorge, A. J., 205 West 78th street, N. Y. City.  
McKesson, John, 91 Fulton street, N. Y. City.  
Mason, A. H., Sabury Building, 59-61 Maiden lane, N. Y. City.  
Marks, E. G., Belleville, N. J.  
Matheson, W. J., 178 Front street, N. Y. City.  
Molineux, Roland, 6 Jersey street, Newark, N. J.  
Morgan, Albert J., 439 West street, N. Y. City.  
Nichols, W. H., 45-47 Cedar street, N. Y. City.  
Norris, Wm. M., Princeton, N. J.  
Paine, Augustus G., 60 Times Building, N. Y. City.  
Perkins, T. S., 39 Garden place, Brooklyn, N. Y.  
Redwood, J. J., 104 Kent street, Brooklyn, N. Y.  
Riker, Jno. J., 45 Cedar street, N. Y. City.  
Rueff, Emil, 426-436 East 10th street, N. Y. City.  
Schleicher, Francis J., 250 Van Alst avenue, Long Island City, L. I.  
Schupphaus, Dr. Robert C., 118 Pennsylvania avenue, Brooklyn, N. Y.  
Schweitzer, Dr. H., 159 Front street, N. Y. City.  
Simonds, Dr. F. M., 128 Sanford avenue, Flushing, L. I.  
Smith, Francis P., U. S. Navy Yard, N. Y.  
Stebbins, J. H., 114 Pearl street, N. Y. City.  
Stevens, John H., The Celluloid Co., Newark, N. J.  
Stillman, Dr. T. B., Stevens Institute of Technology, Hoboken, N. J.  
Stillwell, C. M., Stillwell & Gladding, Box 1261, N. Y.  
Vandenberg, Dr. Horace C., School of Mines, Columbia College, N. Y. City.  
Vulté, Harmon S., School of Mines, Columbia College, N. Y. City.  
Wainwright, Dr. J. H., 22 West 46th street, N. Y. City.  
Waller, F. T., School of Mines, Columbia College, N. Y. City.  
Williams, Seward W., 8 Brighton avenue, East Orange, N. J.  
Wing, Jno. D., Box 51, N. Y.  
Witthaus, Dr. R. A., 118 West 55th street, N. Y. City.  
Woodcock, R. C., 636 West 55th street, N. Y. City.  
Woodman, Durand, 80 Beaver street, N. Y. City.  
Wyatt, Dr. Francis, 12 Park place, N. Y. City.

#### **Interstate League.**

The regular fortnightly meeting of the New York County Branch of the Interstate Retail Druggists' League took place in the Mott Memorial Hall, this city, on Friday, May 17. President Osmun took the chair and opened the meeting at 4 P.M. Secretary Morrison being absent, A. C. Seales was requested to act as secretary *pro tem*.

There was a fair attendance of members present and considerable interest was taken in the proceedings. The president read a letter from Julian B. Schope, attorney for the Chesebrough Manufacturing Co., in which it was represented that he had been successful in securing the indorsement of the German Apothecary Societies of New York and Brooklyn to the Chesebrough Co.'s action in proceeding against druggists whom the company had charged with fraudulent substitution.

The attorney himself was present, and although uninvited followed the communication with a speech. He was very

bitter in his denunciation of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD and attempted to create the impression that an injustice had been done to him.

He was interrupted during the progress of his speech by requests for explanations as to the relation which the Chesebrough Mfg. Co. bore to the Standard Oil Co. and as to whether the Chesebrough Mfg. Co. (Consolidated) was not simply a branch of the great monopoly known as the Standard Oil Company. To this he made a general denial. A representative of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD arose at this point and begged the president's permission to ask the attorney a specific question. He said he represented some twelve or thirteen thousand of the druggists of this country, and felt it would be necessary before taking cognizance of the attorney's remarks to know just exactly whom the attorney represented and whom he was authorized to speak for. The attorney replied "The Chesebrough Manufacturing Co."

A. C. Searles asked if the company had always recognized the retail druggists as the legitimate distributing agents for vaseline and was answered in the affirmative. Mr. Searles said he had always understood differently. It was his impression that the Chesebrough Company preferred that their goods should be handled by the dry goods trade. The attorney then intimated that the Chesebrough Mfg. Co. was not to blame for this impression, as they did not deal with the consumer direct, but were obliged by contract to distribute their goods through Colgate & Co.

The attorney having denied the charge that his agents had attempted in many cases to confuse the seller by the form in which requests for supplies were put, T. B. Breen related a case which had come under his own observation where an agent of the company had persisted in calling for "A bottle of that 5 cent vaseline in the window" when he was fully aware that the substance on display was not the proprietary article.

Mr. Breen was followed by others who spoke in the same strain, giving instances of the manner in which the Chesebrough Co.'s agents had attempted to force them into substituting.

Victor Kostka said the attorney for the Chesebrough Mfg. Co. had slightly misrepresented the action taken by the German Apothecary Society. He explained the society's reason for taking the action they did, and made it appear that it was out of fear of prosecution by the Chesebrough Co. Mr. Kostka was disappointed in not being able to bring the League round to his way of thinking and withdrew from the meeting.

Mr. Breen urged the League to take some action looking to an investigation into the claims of the Chesebrough Mfg. Co. as to its proprietary rights on certain synonyms of petrolatum. He had been informed by some one connected with the company that it was unlawful to use the words "Petroleum jelly" as a title for petrolatum, and he would like to have a definite decision in the matter. He was able and willing for his part to abolish vaseline from his store as he had no difficulty whatever in selling the official article.

Mr. Schope, the attorney for the Chesebrough Co., then requested permission to say a final word to the League. He begged the local branch to withdraw its former resolutions and considered the company entitled to this on the score that all proceedings against druggists had now been abandoned.

Mr. Weinman asked the League to take

the same action as the German Apothecary Society had taken, but Mr. Rontey wanted to know "why the members should be asked not to commit murder;" as a proposition it would be equally sensible. Mr. Breen moved that the communication from the Chesebrough Mfg. Co. be tabled, and the motion was carried by acclamation. President Osmun then appointed a nominating committee to nominate the following officers for the ensuing year: One president, one vice-president, three directors, one secretary and one treasurer. The following committee were named: A. M. Rontey chairman; A. C. Searles, Adrian Fritz, T. B. Breen and J. M. Pringle.

Among the accessions to membership at this meeting were the following: Jos. Ostrewicz, R. A. Kirschmer, Paul F. Metz, C. F. Booth, Chas. W. Rous, L. Gramman, J. J. Kayser, G. A. Cassebere, J. Rosenstock.

### Boston.

"Philanthropy for a bait, business afterward," seems to be the motto recently adopted by the managers of the Massachusetts General Hospital. The excuse given out for the course which they have seen fit to follow is that the income of the hospital was slightly decreased during the year just past, but even if this was a fact the step which they have taken seems to be an unjust one. However, this is where some of these managers had what to them was evidently a "happy thought," but which was not pervaded by a spirit of "live and let live." This was to establish a drug store for their "out-patient" department, so the idea was immediately put into execution.

A dispensary has always been run for the needs of the patients in the hospital; recipes for other patients being dispensed by the different druggists of the city at the pleasure of the patient. The business of this new department which the hospital has established is of such huge proportions that a new and separate dispensary was deemed necessary, and it is presided over by three apothecaries. The dispensing is said to be done either carelessly, hurriedly or ignorantly, resulting in some inelegant pharmaceutical preparations. For instance, the writer was told of a salve obtained at this place consisting of sulphur, zinc oxide and other ingredients, the whole incorporated so poorly that even the patient criticised the preparation. Not content with dispensing to their own patients, instances have recently come to light where outsiders have gone to the dispensary and obtained medicines, though one of the managers has said that this would be stopped.

### Obituary.

JOHN S. MOFFITT.

There was much regret expressed in the trade here at the death of John S. Moffitt, of the Moffitt-West Drug Co. of St. Louis, at the age of thirty-nine, which occurred at his home in that city on Friday morning at nine o'clock. Mr. Moffitt had been in poor health for some time. His death was due to quick consumption.

He was born in Pittsburg, Pa., July 7, 1854. He moved to St. Louis with his parents in 1856, to which place his father went to embark in the drug business with James Richardson. He acquired his early education in the public schools of St.

Louis. The death of his father, when he was but fourteen years of age, left a large family that looked to the boy for support, Mr. Moffitt entered the employ of Richardson & Co. in the fall of 1868 as an assistant in the laboratory.

So much interest did he manifest in his work and so rapidly did he become familiar with the details of the order department of the house his employers recognized the boy's worth and placed him in charge of the druggists' sundries department in 1874, when then but twenty years of age, and through his keen business foresight and good judgment the sales from this particular branch of their business had reached enormous figures at the time they were burned out on January 1, 1889.

Upon learning of the intentions of the Richardson Drug Company to retire from business he immediately organized the Moffitt West Drug Company, of which he was made the president and which position he continuously held to the time of his death, and which venture through his good management has increased from a small beginning until now it is recognized as one of the leading wholesale drug houses in the West.

Mr. Moffitt was a member of all the commercial bodies of St. Louis, and stood high in the councils of its citizens. He was a member of the Board of Control of the N. W. D. A., and was one of the commissioners of charitable institutions of St. Louis; he was a man of strong religious convictions and for several years was superintendent of one of the largest Sunday schools in St. Louis.

The Missouri Pharmaceutical Association is indebted to him for much of its success and especially its large membership. About six weeks ago, he began to realize that he was fast losing strength, and thought to recuperate by a trip to Eureka Springs, where he remained two weeks, but returned to St. Louis in a worse condition than when he left, since which time he rapidly lost ground. He leaves a wife and a charming daughter to mourn his loss besides numberless friends in the trade throughout the country.

### Review of the Wholesale Market.

NEW YORK, May 23, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

We are unable to report any improvement in the condition of the general market. The movement of stock as reported from day to day continues of limited proportions, there being no disposition manifested to operate in a quantity way. There is yet a noticeable absence of inquiry from interior correspondents, but it is believed that the coming month will bring to light many deficiencies that will have to be covered by fresh operations. Prices are maintained with a fair show of steadiness and we have few fluctuations to report. Opium continues weak, and the tendency is toward a lower range of values. Quinine is maintained firmly. Morphine comes lower from manufacturers. Norwegian cod-liver oil is less firm.

#### ADVANCED.

Paris green.  
Mexican sarsaparilla.  
Coriander seed.

#### DECLINED.

Citric acid.  
Opium.  
American saffron.

## DRUGS.

ALCOHOL has not varied in any essential particular since the last report. The Trust managers are maintaining prices despite outside competition and the range is steady at \$2.18 @ \$2.22 as to quantity. The rebate system of the Trust is meeting with some vigorous opposition and it is claimed will have to be abandoned.

BALSAM COPAIBA of the better grades is scarce and prices are maintained firmly; importers ask 35 @ 38c. for Central American and 40 @ 42c. for Para. Jobbers, however, are looking for concessions from these figures.

BALSAM FIR has remained quiet with \$3.20 @ \$3.30 yet the asking price.

BALSAM PERU is in better receipt, but values are maintained firmly at the previous range of say \$1.85 @ \$1.90.

BARKS of all descriptions continue quiet with no changes of consequence to report.

CANTHARIDES, Russian, are reported higher abroad, but no change is reported in this market; the inquiry is confined to small jobbing parcels only.

COD LIVER OIL, Norwegian, continues quiet and prices show an upward tendency with 27 @ 28c. quoted regular.

CUBEB BERRIES meet with a fair amount of attention and values are sustained at the previous range.

CUTTLE BONE, Trieste, has been taken with some freedom during the week and among the sales reported we note a sale of 35 straps which went at a fraction below 9c. The range stands at 9½ @ 9¾c.

ERGOT continues in fair jobbing inquiry with the sales of German at 22 @ 24c. and Spanish 25 @ 27c.

DAMIANA LEAVES have developed no action of any consequence during the week and are meeting with rather limited attention. Numerous small sales are reported within the range of 12 @ 12½c.

INSECT POWDER is in good seasonable demand with the current sales within the range of 16 @ 22c.

MENTHOL is firmer and values are showing an upward tendency in view of strong cable advices from London; the lowest open value in this market is \$4.75, and we quote the range at \$4.75 @ \$5.

MORPHINE has been reduced by the leading manufacturers to \$2. in bulk, \$2.05 in ounces and \$2.25 @ \$2.30 in eighths. Other brands are offered at a reduction of ten cents from these values.

OPIUM is to remain on the free list, at least it has been so decided in the Senate, though what action the lower House may take when the bill is returned there for consideration cannot be foretold. Many of the large dealers who had stocked up in anticipation of the imposition of the duty are considerably depressed over the turn affairs have taken. Late mail advices from Smyrna are to the effect that the steady rains in the latter part of April have had a very favorable effect upon the growing crops. Under the influence of this improvement in the crop prospects the Smyrna dealers are said to be very willing to take contracts even at a reduction from the ruling market quotations. Values in this market are now slightly above those prevailing elsewhere, but concessions upon the part of holders are looked for and a revision of prices is likely to be announced soon. Natural in case lots may now be obtained at \$2.12½ @ \$2.15 as to test, and it is a matter of comment that at these figures importers net no profit. For less quantities than cases the quotation of the market is \$2.20 @ \$2.22½. Powdered is quoted \$3.10 @ \$3.40 as to test and holder. QUININE continues to be held with

strength and firmness, and the market is well sustained upon the basis of 23 @ 23½c. for foreign brands. Domestic bulk is firmly maintained at manufacturers' quotations.

SAFFRON, American, has declined to 40 @ 42c. The approach of the new crop is responsible for the decline in the price of old.

SOAP, White Castile, Conti's, continues held at the range of 9½ @ 9¾c.; the former figure being for goods to arrive.

TONKA BEANS continue in very strong position with the available quantity exceedingly small; Angostura held at \$2 @ \$2.15.

VANILLA BEANS are in more abundant stock, but prices are maintained steadily upon the basis of \$6.15 @ \$13 for whole and \$5.25 @ \$6 for cut.

## DYESTUFFS.

BICHROMATE OF POTASH is lower, the price from manufacturers' hands being now 9¾c.

CUTCH of prime quality is scarce and firm at 5¼ @ 6c. and a moderate trade is doing at this range.

DIVI DIVI is scarce and firmer with sellers quoting 55 @ 65c.; in some instances an advance is asked upon these prices.

GAMBIER continues in good demand at former prices. We quote the range at 4 @ 4¾c. for store goods and 3¾ @ 3.90c.

INDIGO continues to meet with a steady fair inquiry and the market is firm upon the basis of 90c. @ \$1 for low grade Bengal, \$1.05 @ \$1.20 for medium and \$1.25 @ \$1.50 for good to fine. Madras is held at 4½ @ 5c.

NUTGALLS, Blue Aleppo, remain very quiet and values are firm at the range of 13½ @ 14c.

SUMAC, Sicily, is in moderate demand and steady at \$72.50 @ \$77.50 as to brand and quantity.

## CHEMICALS.

ARSENIC, White, is in fair request and firm at 3¾c.

BLEACHING POWDER is dull and featureless. We quote the range for English in casks at \$2.25 @ \$2.50.

BLUE VITRIOL continues inquired for, but the market is very lightly supplied and manufacturers appear to have little or no surplus. The price remains 3¼ @ 4c.

BORAX is developing an easier tendency and lower prices may be looked for as the consequence of the proposed reduction in duties.

BRIMSTONE, crude seconds, is given very little consideration. Spot quoted nominally \$17 @ \$17.50, and forward shipments \$ 6.50.

CAUSTIC SODA is in better demand, with \$2.60 @ \$2.75 now quoted as the range for 70 and 75 per cent.

CHLORATE OF POTASH continues quiet but steady at 13½ @ 13¾c. for German, and 13½ @ 14c. for English.

CITRIC ACID remains quiet at the recent decline to 40½c., for bbls. and 41c. for kegs.

NITRATE OF SODA continues quiet; for quantity lots ex-ship \$2.25 is asked and for small lots \$2.30 is named as acceptable. Store price is \$2.30 @ \$2.35 as to quantity.

PARIS GREEN has been advanced by the manufacturers to 23 @ 20½c. as to style of package and quantity, the previous rebate being allowed.

SAL AMMONIAC, white grain, is higher in sympathy with the market abroad; sales of prime German have been made in a quantity way down to 6¾c., but 7c. is now asked in most instances.

QUICKSILVER continues in good jobbing demand and the price is well sustained at 49 @ 50c.

## ESSENTIAL OILS.

ANISE is maintained at \$1.50, at which quotation small parcels are taken by the trade.

CASSIA continues selling in small lots at 82½ @ 85c. as to quantity and quality.

CITRONELLA has been inquired for freely during the week and prices have advanced, holders now quoting 25c. as an inside value.

CUBEB is yet held at \$1.45 @ \$1.50, though the trade requirements at the moment are very moderate.

LEMON continues in fair demand and sales are making at 95c. @ \$1.35 as to brand, the outside value for Sanderson's.

PEPPERMINT HGH reflects no change from recent reports. Small export orders are in the market at a limit of \$2.80, but there appears to be nothing obtainable at this figure. Bulk remains \$2.30 @ \$2.60 as to quality.

## GUMS.

ARABIC and Senegal have been given more attention with sales reported of a hundred packages of the various kinds within the range of our quotation.

CAMPOR is selling quite freely at the range of 26 @ 28c., but no sales of consequence are reported.

CHICLE offers at 26 @ 28c., though no sales of consequence are reported.

KINO is firm at \$1.20, but there is only a limited demand at the moment.

SHELLAC is dull and prices are nominal. DC is held at 34 @ 35c.; VSO 33c.; Diamond 1 30c. and SS 29c.

## ROOTS.

ACONITE is firmly held at 12c. for German and the distribution is of average proportions.

DANDELION is maintained 7½ @ 8c. for German and the available supply is small. IPECAC continues very dull though the quotations remain \$1.25 @ \$1.40 as to quality.

JALAP is dull, but the market continues firm upon the basis of 20 @ 21c.

GENTIAN does not vary from 3½ @ 4c. and numerous small sales are reported at this range.

GINSENG is yet quoted \$2.35 @ \$3, but lower values are anticipated soon.

GOLDEN SEAL is scarce and quoted 21c. as an inside price.

SARSAPARILLA, Mexican, is higher owing to scarcity; 9c. is now asked by the principal holder.

SENEGA has been in good request and among other transactions we are reported a sale of 25,000 lbs. at 38½c.

SNAKE, Texas, is jobbing fairly at 30c.

## SEEDS.

ANISE does not vary from 8½ @ 10c. for new Italian, but the demand is of small proportions.

CANARY, Smyrna, is in liberal stock and more freely offered; purchases can now be made down to 2¼c.

CARAWAY, Dutch, is quoted 6¼ @ 6¾c., though little inquiry is reported.

CELERY continues dull; limited quantities can now be obtained at 16½c.

CORIANDER is scarce and firm at 18½c.

HEMP, Russian, is firmer though not notably higher; purchases can yet be made at 2¼c.

RAPE, German, is quoted 2¼ @ 2¾c. with small sales within the range.

MUSTARD is firm though the demand at the moment is limited. Yellow quoted 4c. and brown 3¾c.

**Approaching Pharmaceutical Meetings.**

MAY 29.

The Kansas Association meets at Salina. Local secretary, Emil Arner.

JUNE 5.

The Arkansas Association meets at Hot Springs. Secretary, J. W. Beidelman, Little Rock.

The Ohio Association meets at Cincinnati. Local secretary, A. Wetterstroem.

The Utah Association meets at Provo. Secretary, C. H. McCoy, Salt Lake City.

JUNE 12.

The Minnesota Association meets at Lake Minnetonka. Secretary, C. T. Heller, St. Paul.

The Missouri Association meets at Excelsior Springs. Local secretary, C. L. Cowens.

The Pennsylvania Association meets at Neversink Mountain House. Local secretary, J. B. Raser, Reading.

JUNE 18.

Indiana Association meets at Evansville. Local secretary, George W. Haynie.

JUNE 26.

The New York Association meets at Saratoga. Local secretary, C. F. Fish.

JULY 10.

The Virginia Association meets at Blue Ridge Springs. Local secretary, W. B. Spickard.

**The American Pharmaceutical Association Meeting.**

The A. P. A. could not have selected a better place than Asheville, N. C., for holding their forty-second annual convention. "Girt round with rugged mountains," the "Queen City" of the "Land of the Sky," is without a peer either in this country or abroad, and of all the twelve months of the year September is the one we would choose for a visit to Asheville.

Asheville is situated in the heart of the "Blue Ridge Mountains" in the extreme western section of North Carolina. It is this section that Christian Reid, Charles Egbert Craddock, Francis Hodgson Burnett and Bill Nye have made famous by their writings, and one cannot but wonder that the grand and the beautiful, ever present among these majestic hills, did not inspire them to greater efforts. Climatic conditions are at the best in Asheville. The nights are cool and the days never uncomfortably warm. Hotel service is unsurpassed; the Battery Park, Swannanoa, Berkeley, Oakland Heights and Kenilworth Inn are all first class hotels, conducted in the most approved style. Electric car lines reach all parts of the city and a dummy railroad conveys the sightseer to the top of Sunset Mountain, a commanding elevation 1,200 feet above the town.

Asheville is easy of access from all parts of the United States. It is reached via the Richmond & Danville Railroad from four points. From Salisbury on the main line of the Richmond & Danville the Western North Carolina Road taps Asheville on the east. On the south the Asheville & Spartanburg Road connects with the main line at Spartanburg. On the west the Murphy division of the Western North Carolina Road reaches Murphy, the terminus of the Marietta & North Georgia Road, and on the north the W. N. C. Road connects with the East Tennessee, Virginia & Georgia system at Paint Rock.

Asheville is 20 hours from New York, 16 hours from Baltimore, 24 hours from Chicago, 14 hours from Cincinnati, 14 hours from Jacksonville, 24 hours from New Orleans, 24 hours from St. Louis.

Finely appointed vestibuled trains on the Richmond & Danville systems carry through sleepers for Asheville, one from New York and one from Jacksonville; a through sleeper is also run between Asheville and Cincinnati.

The population is about 12,000, made up to a great extent of people from all over the United States, some living there on account of health and others for pleasure. Many beautiful residences adorn the principal streets and occupy picturesque sites on elevations commanding the city.

George Vanderbilt has selected Asheville as a place to build a magnificent palace for a country residence, eight thousand acres purchased by him at the confluence of the French Broad and Swannanoa Rivers, about one mile outside the city limits, is now being converted into an extensive park, and a residence is being erected which promises to surpass almost anything in this country. Four million dollars he has already ex-

the rivers being particularly beautiful. The city is well equipped in the way of carriages, and a careful driver can be easily procured for any drive one may desire.

As a health resort Asheville's reputation is world-wide. The dry air in that locality is favorable to those suffering with pulmonary troubles, and physicians from all over the United States send patients there invariably with beneficial results—that is if the patients are not past help when they get there.

Nat. S. Rogers, Secretary Citizens' Committee A. P. A. says: "We can only ask the members of the A. P. A. to come and see for themselves a country that nature has smiled upon, a country that is as beautiful in winter as in summer, and one whose people will welcome them with open arms, hoping that when after the convention has completed its work its attendants will carry away with them kind and pleasant recollections of Asheville and the "Land of the Sky."

For any further information apply to Whiteford G. Smith, Local Secretary, Asheville, N. C., or to the editor of this journal.



THE AMERICAN PHARMACEUTICAL ASSOCIATION MEETING.—VIEW NEAR ASHEVILLE, N. C.

pended in this work and it is estimated that six million will be necessary to carry out his present undertakings. A drive over his estate, and a view of the work in progress and contemplated, convinces one that it is the most elaborate undertaking in the pursuit of pleasure ever entered into by a citizen of the United States. From the commanding elevation upon which his residence is now in process of construction a grand panorama is spread out before you. The Black Mountains, where rises the beautiful Swannanoa, are to be seen to the northeast—Mount Mitchell, their highest peak, rising to a height of 6,700 feet above the level of the sea, and being the highest land east of the Rocky Mountains. To the west are Pisgah and the Balsams, to the south the Blue Ridge, and to the north Asheville and beyond the Smoky Mountains and Tennessee.

The members of the Gridiron Club of Washington, who were entertained in Asheville in November, were all warm in their praise of Asheville, but nothing so entranced them as the view from Vanderbilt's.

There are carriage drives without number in and about Asheville, those along

**The Massachusetts Meeting.**

The president of the Massachusetts Association has issued the following circular:

EVERY PHARMACIST SHOULD READ THE FOLLOWING CAREFULLY, TWICE.

The next annual meeting of this Association will be held at Worcester, June 26, 27 and 28, 1894.

If you are not already a member we invite you to join us and be present at this meeting. All who have been benefited by the present "Local Organizations" (composing the Interstate league) should bear in mind that the Massachusetts State Pharmaceutical Association was the originator of this movement, and it is its committee on local organization, with such assistance as they have brought into action, that today are carrying on this work with so much promise of success in bringing the trade back to its old time prosperity.

At the last annual meeting of the association held at Nantasket Beach in June, 1893, it was voted to give every registered pharmacist in the State in good and regular standing, who shall apply for membership during the year 1893-4, a copy of the full proceedings of that meeting.

printed in book form, which shall contain besides the usual valuable and instructive matter. A complete compilation of all the laws on the statute books of the State relating to pharmacy. This will be of inestimable value, and should of itself be a sufficient inducement to cause every pharmacist not already a member to send an application to the secretary at once. No initiation fee is charged; but the annual dues, \$2, should accompany the application, which will pay for the year following the acceptance of some.

Send your application now while it is fresh in your mind.

J. ALLEN RICE, President.  
M. L. H. Leavitt, Secretary.  
65 Cambridge St., Boston.

#### Texas Association.

The fifteenth annual meeting of the Texas Pharmaceutical Association was called to order in the Board of Trade hall at Austin, on Tuesday morning, May 8, by President L. Myers Connor of Dallas.

In his opening address President Connor reviewed briefly the history of the organization since its inception in Dallas when he was the first president elected by it down to the present. He spoke with commendation and pride of the work of Dr. Rice and the pharmacopoeia committee.

As to the pharmacy laws, he said:

We want a law that will compel every man who dispenses medicine to be thoroughly competent, and let the test of his ability be a rigid examination before an able board, regardless of any diploma he may be so fortunate as to possess from any college of pharmacy, for it must be conceded that careful counter training is just or more essential than the theoretical information which can possibly be obtained in a course of twice as long. The present laws for the protection of pharmacy, on the statute books of Texas, are the merest subterfuge and can not serve any good purpose to the people for whom it was evidently intended.

Sections 2 and 4 are particularly conflicting, and it is to be hoped that this association will, at the next meeting of the legislature, urge the committee on the same to work for such amendments as they deem proper, and have the bill presented early in the session, so that same may be reached in due time.

He recommended a vigorous and concerted movement toward interesting physicians in the preparations of the National Formulary. He recommended that the example of the Missouri Association in selecting a permanent meeting place be adopted.

Several delegates present were invited to take seats as members.

J. R. Carpenter of Webberville and Frank H. Raymond of Austin, and Chas. J. Boichert of Kyle, were elected members.

The reports of various committees and officers were read and adopted. Among them being the report of the committee on president's address approving the recommendation as to the selection of a permanent place of meeting.

After the formal opening on Wednesday morning applications for membership from the following were favorably acted upon:

Felix E. McKay of Temple, C. A. Taylor of Midland, John A. Campbell of Austin, Leland Douthett of Georgetown, W. L. Mann of Georgetown, L. S. Williams of Giddings, T. J. McDade of Waxahatchie, J. J. Hoffstadter, and A. R. Bond of Austin.

The question of expense of entertainment was discussed but no action taken. The election of officers then followed and resulted in the choice of the following: H. L. Carleton of Austin, president; Geo. L. McKinstry of Sherman; George Schmidt of San Antonio, and W. F. Robertson of Gonzales, vice-presidents; George W. Heyer of Houston, secretary, and W. F. Shook of Dallas, secretary. In the absence of President-elect Carleton W. B. Morrison of Waco was selected as president *pro tem*.

G. H. Kalteyer of San Antonio offered a motion that the association present a gold medal to the first graduate from the pharmacy branch of the Texas University at Galveston, which was unanimously adopted. Dr. Kennedy of Galveston, who occupies the chair of pharmacy, returned thanks to the association for its appreciation of the efforts of the faculty, and assured it that every effort would be made to deserve it.

A resolution deprecating the practice of a few wholesalers selling to druggists who cut prices was adopted.

Galveston was unanimously selected for the next place of meeting of the association, and the convention adjourned until 2 P.M.

At the afternoon session W. B. Morrison of Waco was appointed by the president delegate to the American Pharmaceutical Association.

G. H. Walker of Gonzales was elected chaplain of the association.

At 3 P.M. an adjournment was taken and the association went out to the dam and enjoyed an excursion on the *Ben Hur*.

On convening Thursday morning President Carlton announced the following committee:

On Notes and Queries—R. H. Walker, G. L. McKinstry and H. C. Whitney.

Prizes—James Kennedy, W. B. Morrison and Oscar Jannasch.

On Adulterations—James Kennedy, E. Dreiss, R. H. Bingham, W. R. Neville, W. L. Mann and C. E. Wicker.

On Legislation—L. Myers Connor, J. L. Cunningham, W. A. Williamson, J. W. Graham.

On Medical Conference—J. Burghheim, R. Schweickhardt, W. B. Morrison.

Auditing Committee—G. H. Kalteyer, H. Behrens, J. A. Landrum.

The following papers were presented and discussed: "Pharmaceutical Education," by Dr. James Kennedy; "Warburg's Tincture," by Richard Schweickhardt of Dallas; "Masking Quinine" and "Preparation of Oleates," by Wm. R. Neville of Houston; Detannated Elixirs of Cinchona, of Gentian and of Wild Cherry," by A. E. Schaeffer of Houston.

A bill was presented at the last session of the legislature providing for a general State Board of Pharmacy instead of the numerous district boards as under the existing statute, and it also provides for an annual registration with payment of a fee of \$1 each year.

The committee on prizes reported as follows:

We, the committee, appointed to examine the papers submitted to this association and to award the prizes offered, beg leave to report that they would recommend they be awarded as follows: Gold medal to A. E. Schaeffer of Houston, \$25; to R. Schweickhardt of Dallas, diamond scarf pin to Wm. R. Neville of Houston. We also recommend that a vote of thanks be tendered Mr. R. R. De Cline of Houston for his able and interesting paper.

Resolutions commending the Department of Pharmacy of the University of Texas were passed.

Dr. James Kennedy was elected local secretary, and after passing the usual votes of thanks the convention adjourned to meet in Galveston next year.

#### Georgia Association.

The Georgia Pharmaceutical Association met in the Knights of Pythias hall in Americus on May 8. The nineteenth annual session was opened with prayer by Rev. Mr. Christian. The address of welcome was delivered by the Mayor and responded to by Dr. Goodwyn of Macon. Interesting papers were read by many members, among the number being Dr. Durban of Augusta.

President Cosby delivered an interesting address which was followed by a report of the committee on adulteration submitted by Dr. H. R. Slack, chairman of the committee.

Dr. John Goodwyn of Macon resigned the chairmanship of the Board of Pharmacy after four years of service and S. C. Durban of Augusta was chosen as his successor.

At the afternoon session the following officers were elected: President, Jno. P. Turner of Columbus; vice-presidents, G. W. Curry of Rome, R. C. Dickinson of Thomasville, and Lynn Fort of Americus; treasurer, M. H. Taylor of Macon, and secretary, H. H. Arrington of Summerville.

Papers were presented by John C. Turner, S. C. Durban, G. W. Goodwyn, Harry Sharpe and President Cosby.

Dr. F. Joergen made an address based on his experience with the yellow fever at Brunswick last summer.

A number of applications for membership were favorably acted upon.

At the morning session of the second day Professors Caspari and Oldberg were elected to honorary membership. The newly elected officers were installed and several interesting papers were read.

After much routine work, in the afternoon the association adjourned to meet in Savannah on May 21, 1895.

In the evening an elaborate banquet was tendered the visitors by the citizens of Americus.

#### Mississippi Association.

The association met in the Senate Chamber at Jackson, on May 8, at the call of President H. F. West.

The business transacted was mostly of a routine nature.

The following officers were elected: President, N. C. Mosby of Jackson; vice-presidents, John Hough of Magnolia, and R. R. Ledbetter of Jackson; secretary, Chris. H. Herbert of Jackson; treasurer, W. G. Barnes of Winona.

Following are the standing committees for the next year:

Executive Committee—J. C. Shotelle, Dr. Ellis and H. C. Price.

On Papers and Queries—J. P. Mayo, Carson Lemly, S. M. Dampier, Geo. L. Moore and W. T. Matthews.

On Trade Interests—P. B. King, John Hughes, O. Lillybeck, B. Lemly and C. H. Clifton.

On Legislation—J. W. Eckford, A. G. Cassell, B. Lemly, H. F. West, Wade Harvey and G. S. Beall.

On Revision—L. A. Rather, J. R. Small and C. H. Herbert.

Delegates to the A. P. A.—J. W. Eckford, J. C. Means, H. F. West, J. C. Shotelle and Carson Lemly.

The association will meet next year at Winona.

#### Alabama Association.

The Alabama Pharmaceutical Association met on May 8 in the Knights of Pythias Hall, Anniston, with President E. P. Galt of Selma in the chair.

Mayor Hight welcomed the association and was responded to by Mr. Bingham of Tuscaloosa. After the reading of several papers the association adjourned till Wednesday morning.

On convening Wednesday morning the following officers were elected: President, E. P. Galt of Selma; vice-president, J. L. Wike of Anniston; secretary, P. C. Candidus of Mobile; treasurer, E. E. Elam of Anniston. Montgomery was selected as the place of meeting for next year.

Executive Committee—M. F. Tucker, W. F. Punch, W. E. Bingham.

On Queries—W. B. Parker, S. H. Henderson, Dr. S. E. Winemore.

On Adulterations—Chas. A. Mohr, J. C. Ruff, J. W. Milner.

On Commercial Interests—M. M. Stone, E. B. Norton, E. F. Amerine.

On Legislation—W. F. Dent, C. B. Goldthwaite, Dr. J. D. Humphrey.

Delegates to American Pharmaceutical Association—F. C. Candidus, E. P. Galt, E. E. Elam, S. H. Henderson, Dr. J. D. Humphrey.



# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

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IN Scranton, Pennsylvania, the pharmacists are being harassed by the blue laws of 1794, several having been forced to pay fines for selling soda on Sundays. While the individual pharmacist may object to this restriction it would probably be on the whole a very desirable thing if Sunday sales could be sharply restricted to actual medicinal necessities. Such restrictions would be a long step toward giving the pharmacist some of that leisure which he now so painfully lacks.

## ATROPINE AND ATROPINE SULPHATE, U.S.P.

THE *Pharmaceutical Journal and Transactions* prints a letter from JOHN C. UMNKY which contains the following criticism directed against the wording of U. S. P. description of atropine:

Atropine is described in the United States Pharmacopoeia, 1890, thus: "As it occurs in commerce it is always accompanied by a small proportion of hyoscyamine extracted along with it, from which it cannot be readily separated." This definition, however, is inaccurate, inasmuch as it has been shown that the alkaloid exists almost entirely as hyoscyamine in the plant, neither is this description in accord with the physical and chemical properties as stated in that work.

The melting point of pure atropine, as recorded by Schmidt, is 115°-115.5 C., while that of pure hyoscyamine as recorded by Hesse is 108° 5. The U. S. P., however, states "at about 108° C. it melts, forming a colorless liquid," thus practically admitting a preparation consisting almost entirely of hyoscyamine rather than "a small proportion." Moreover, the U. S. P. requires the "absence of more than a small proportion of hyoscyamine" when describing the formation of a gold salt, the reaction given being characteristic of pure atropine alone. Again, atropine sulphate is described in the same work as melting at 187° C. The melting point of atropine sulphate given by the Pharm. Germ., iii, is about 188° 0 C., the requirement being that it shall be prepared from a pure base melting at 115° 5. The melting point of sulphate of hyoscyamine recorded by Hesse is 201°, and the presence of a small proportion of this salt in atropine sulphate raises the melting point several degrees.

I find that atropine sulphate melting at 184° to 185° C. yields, by liberation of the base with ammonia, a pure atropine which readily crystallizes and melts at 115° 5 C.

It would seem, therefore, that the wording of the U.S.P. description of atropine should be modified so as to show that the hyoscyamine present is in all probability a small proportion unconverted into atropine during the process of extraction, and if it be decided to permit the use of atropine containing a "small proportion" of hyoscyamine, then the melting point and gold chloride tests should be modified accordingly, instead of representing in the one instance a preparation consisting almost entirely of hyoscyamine and in the other case an almost absolutely pure atropine. These amendments would secure chemical accuracy, which is desirable, notwithstanding the physiological differences between the two bases in question may be regarded as slight.

This would seem to call for some explanation by either the Committee of Revision or the chairman of the Subcommittee on Proximate Principles.

IT does not transpire that ALBERT A. BAKER, "a regularly qualified and practicing druggist" of Rochester, denies the authorship of a most ardent and convincing testimonial as to the value of Dr. ACKERS' English Remedy, which was published by the agents thereof, and the inference is that he is the author. Now comes into court this ALBERT A. BAKER seeking to restrain the patent medicine man from further use of his testimonial and asking an accounting for his share of the profits which have accrued through the use of his name. What delightful possibilities of profitable occupation this opens up to decayed but once popular actors, orators and statesmen. How very much better than the mere sale of a testimonial for a few paltry hundreds it is to wait until the soap or face bleach or rheumatic remedy has earned a large profit and then to pounce upon the owners with an order from the courts for an accounting of one's share of the profits. Really Mr. BAKER is to be congratulated upon having introduced an entirely new precedent, for having adumbrated a new profession, a profession whose followers we may denominate recalcitrant testimonialists. In the mean time advertisers may be a little more cautious as to the use of names in their testimonials.

THE sale of medical diplomas has at all times offered a tempting field for the ingenuity of the unscrupulous schemer but it remained for the genius and perspicacity of a pharmacist burdened with the leisure attending life in a small village to evolve from his inner consciousness a mythical International University with a department of theology from which diplomas conferring the degree of Doctor of Divinity were obtainable at the rock bottom price of five dollars each. The aspirants for the spiritual doctorate seem, however, to have been less plentiful or more conscientious than are those who would minister to bodily and not spiritual infirmities. The scheme has failed.

## Asbestos.\*

BY H. J. LOHMANN.

I have here two specimens of asbestos, one American and the other Canadian. Asbestos as it is generally found is a compact mass of fibers. The ore as we might term it shows the stratae of asbestos and rock alternately, the fibers of asbestos being longitudinal. From the following analysis made by Mr. Donald, professor of chemistry at McGill College, Montreal, it will be readily seen that there is a future for it in our laboratories.

	Italian.	Canadian.	Canadian.
Silica.....	40.85	40.92	39.05
Magnesia.....	40.18	33.21	40.07
Water of hydration.....	14.02	12.22	14.48
Alumina.....	2.82	6.69	3.69
Protoxide of Iron.....	0.75	5.77 (oxide)	2.41
Soda.....	1.37	0.68	....
Potash, etc.....	0.15	0.22	....
Sulphuric acid.....	0.31	traces	....
		Undetermined	1.10
	99.85	99.71	100.00

Very little attention has been paid to this substance by the pharmaceutical profession, a fact greatly to be regretted. The composition in itself warrants the application of it in many respects that have thus far been disregarded.

It is of neutral reaction. It is not affected and does not affect any ordinary liquid. Stronger mineral acids decompose it.

We all know its powers of resistance to combustion. Some time ago I saw a brick of compressed asbestos that had been exposed to a white heat for five hours, and upon cooling it was broken into pieces and was found unaltered in every respect.

Its application in our laboratories, however, seems to be limited. In applying chalk, magnesia or any of the substances ordinarily applied as filtrants we observe after a short time a precipitate. This very objectionable feature is obviated by the application of asbestos.

## Electrolytic Separations.†

The authors have studied the electrolytic separation of metals in presence of free nitric acid with the following results:

*Mercury from Lead*—Satisfactory, provided sufficient nitric acid be present.

*Mercury from Lead and Bismuth*—Unsatisfactory; bismuth was discovered at both poles.

*Silver from Lead*—Satisfactory.

*Copper from Cadmium*—Satisfactory.

*Copper from Zinc*—Satisfactory.

*Copper from Zinc, Cobalt and Nickel*—Satisfactory.

*Copper from Iron and Zinc*—Satisfactory.

*Bismuth from Cadmium*—Satisfactory; excess of free acid not necessary.

*Bismuth from Zinc*—Satisfactory.

*Bismuth from Nickel*—Satisfactory.

*Bismuth from Cobalt*—Separation possible.

*Bismuth from Zinc, Cobalt and Nickel*—Unsatisfactory; bismuth always contaminated with cobalt and nickel.

*Bismuth from Cobalt and Nickel*—Unsatisfactory; bismuth contained nickel.

*Bismuth from Cobalt and Zinc*—Unsatisfactory; cobalt partially precipitated along with the bismuth. Subsequent experiments showed that the separation of bismuth from cobalt, nickel and zinc was possible if sufficient nitric acid were present.

\*Read at the meeting of the New Jersey Pharmaceutical Association.

†E. F. Smith and J. B. Moyer, *J. Anal. and Appl. Chem.*, 7-252-257. See A. D. & F. R. for March 22, p. 138.

In all these experiments the quantities of metal operated on were about a decigramme. The nitric acid (sp. gr. 1.8) added varied about 2 and 30 cc. The total dilution 170-300 cc. The strength of current with voltmeter and electrolyte in circuit liberated 1.8-0.2 cc. electrolytic gas per minute.

## Further Experiments with Liquid Air.

A frozen soap bubble broken in two and floating like an iridescent transparent egg shell on the surface of a vessel of liquid air was one of the most marvelous sights shown by Prof. Dewar in a lecture at the Royal Institution on the effects of intense cold. The investigation of this new field of science is developing many wonderful bits of knowledge, some of which are sure to be turned to valuable practical account before long. The pretty experiment spoken of which delighted the audience was quite simple. The professor poured a few spoonfuls of liquid air into a glass vessel. The intense cold caused by evaporation produced a miniature snowstorm in the atmosphere above the liquid. The operator lowered the soap bubble on the end of a rod into a freezing atmosphere. The bubble became darker. The movements of the rainbow-colored film grew slower. It contracted somewhat in size, and a moment later froze. A slight movement broke it from the rod in two pieces, which floated for an hour, gradually accumulating a tiny snowdrift within, precipitated from the freezing air above.—*N. Y. Sun.*

## The Whistling Tree.

A species of acacia, which grows very abundantly in Nubia and the Soudan, is also called the "whistling tree" by the natives. Its shoots are frequently, by the agency of the larvae of insects, distorted in shape, and swollen into a globular bladder from one to two inches in diameter. After the insect has emerged from a circular hole in the side of this swelling, the opening, played upon by the wind, becomes a musical instrument, nearly equal in sound to a sweet-toned flute.

## Doctoring the Ameer's Household.

Miss Hamilton, a lady doctor, has just left India for Cabul, where she is specially to attend on the ladies of the household of the Ameer of Afghanistan. While in Afghanistan she is to have a personal guard of six soldiers, three of whom will accompany her when she goes out. She is accompanied by one native Indian servant, and the Indian government has disclaimed all responsibility for whatever may happen to her. The Ameer has engaged her services for a period of six months. T. A. Martin, the Ameer's agent, is now on his way to England.

## An Ointment 3,000 Years Old.

Among the Egyptian curiosities contained in the famous museum of the Duke of Northumberland, at Alnwick, is a jar of ointment which is upward of 3,000 years old. Notwithstanding this extreme antiquity the ointment retains a powerful smell. This result, obtained at it was in pre-antiseptic days, says a good deal for the thoroughness of the empirical methods in vogue among the early Egyptians. How much of the modern therapeutic output in ointments would stand such a test as the above?

## Miscellaneous Formulas.

## POWDERS FOR CATARRH.

(BRANDENBERG.—*Comp. B. Sch. Aesto.*)

## I.

	Grammes.
Boric acid, fine powder.....	7 (70 grains)
Euphorin (phenylurethan).....	3 (30 grains)

Mix and snuff up the nose.

## II.

Boric acid in fine powder.....	} of each equal parts
Euphorin.....	
Iodoform.....	

Blow into the nose several times daily.

## III.

(TROMMSDORFF.—*Phar. Centralhalle.*)

	Grammes.
Zinc ozosolod in fine powder.....	15
Powder sugar of milk.....	100
Menthol.....	1

## FLOOR VARNISH.

[[BUCHHEISTER.—*Hand. d. Drog. Praxis.*]

	Parts.
Manila copal.....	170
Shellac.....	160
Oil of turpentine.....	160
Alcohol.....	510

Dissolve the copal and oil of turpentine in 170 parts of alcohol; dissolve the shellac in 340 parts of alcohol, filter and add to the solution of copal and turpentine.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Marlenbad Salts.** P. T.—This is stated to have the following composition:

Sodium bicarbonate.....	5 ounces
Sodium sulphate (dried).....	12 ounces
Sodium chloride.....	1½ ounces
Magnesium sulphate.....	2 ounces
Sodium bisulphate (dried).....	2½ ounces

Mix the salts, previously dried, separately, and keep them carefully from the air.

**Toilet Lavender Salts.** G. D. F.—The formula given below furnishes an agreeable lavender water:

Oil of lavender.....	3 drachms
Oil of bergamot.....	3 drachms
Oil of rose.....	6 drops
Oil of cloves.....	6 drops
Oil of rosemary.....	45 minims
Tincture of musk.....	45 minims
Benzoic acid.....	30 grains
Honey.....	4 drams
Alcohol.....	1 pint
Rosewater.....	1½ ounces

Thoroughly mix and filter.

**Carbonate of Guaiacol.** E. S. W.—Carbonate of guaiacol is made by passing chlorine and carbonic acid gas into a solution of guaiacol in soda solution, when the carbonate precipitates. The precipitate, washed and crystallized from alcohol, is in form of fine, crystalline powder without odor and taste, insoluble in water, slightly soluble in alcohol, easily in hot alcohol, ether, chloroform and benzol. In its action it resembles salol, being resolved in the alimentary canal into carbonic acid and guaiacol before it is absorbed.

**Quina Laroche.** "Subscriber."—Proceed as follows:

Iron pyrophosphate.....	30 parts
Red cinchona bark.....	50 parts
Diluted alcohol.....	500 parts
White sugar.....	800 parts
White wine.....	1,000 parts
Distilled water.....	a sufficiency

Infuse the cinchona in enough water to yield 500 parts of fluid; in this dissolve the iron salt, add the sugar, alcohol and wine, and set aside for several days before filtering.

**Copal Varnish.** H. A. S.—A superior copal varnish may be made by using a highly rectified oil of turpentine and selecting the other ingredients with equal care. White copal varnish is made as follows:

Copal.....	4 ounces
Camphor.....	½ ounce
White drying oil.....	3 ounces
Rectified oil of turpentine.....	2 ounces

Reduce the copal to powder, mix the camphor and drying oil, then heat on a slow fire and add the oil of turpentine and strain.

**Fetid Breath.** E. J. L.—This is usually an indication of some derangement of the digestive organs, and for treatment a physician should be consulted. As topical applications try either of the following:

#### CHLORINE GARGLE.

Chlorinated lime.....	2 drams
Water.....	1 pint

Triturate, filter and add to the liquor

Clarified honey.....	1 ounce
----------------------	---------

The gargle is very advantageous for persons who have fetid breath.

#### ANTISEPTIC LIQUID DENTIFRICE.

Borax.....	15 grains
Thymol.....	8 grains
Distilled water.....	1 pint

Wash the mouth several times a day with this solution

**Sesquiterpene.** C. J. L.—A simple definition of this term would be, A camphor of the composition  $C_{15}H_{26}$ . O. Sesquiterpenes are formed by the polymerization of terpenes, effected usually by heating a terpene in a sealed tube, or by shaking it with concentrated sulphuric acid or with certain other substances. Oil of turpentine is the terpene most largely used.

**Illicium Religiosum.** E. J. L.—This is a species of anise which differs from the official star anise in having woody shriveled carpels, curved beak, faint clove-like odor and an unpleasant taste. It is very poisonous, causing vomiting, epileptiform convulsions with dilated pupils and exceedingly cyanosed countenance. It owes its poisonous properties to the existence of crystalline principle for which the name of Shikimin has been proposed.

**Violet Water.** G. D. F.—An excellent violet toilet water may be prepared as follows:

Extract of cassia.....	8 ounces
Extract of orange flower.....	3½ ounces
Tincture of orris root.....	5½ ounces
Essence of rose (triple).....	5½ ounces
Diluted alcohol.....	2 pints

**To Clean Marble.**—F. T. L. writes: "Please tell me how to remove stains from white marble of soda water counter."

The stains in marble of soda water counter usually extend in so deep that there is no good remedy except resurfacing. However, try the following: Cover

the stained place with quicklime wet with a very strong aqueous solution of sodium carbonate. Allow the paste to remain on for several hours, then remove and polish if necessary. To make a really satisfactory job, however, the top should be refinished.

**Ethylphenols.**—Béhal and Choay have separated three ethylphenols—viz., para-ethylphenol, m.p.  $46^{\circ}\text{C}$ . and boiling at  $215-216^{\circ}$ , its benzoate melts at  $59-60^{\circ}\text{C}$ . and boils at  $328^{\circ}\text{C}$ .; orthoethylphenol is a fluid boiling at  $203-204^{\circ}\text{C}$ ., with a solid benzoate melting at  $88-89^{\circ}\text{C}$ . and boiling at  $814-815^{\circ}\text{C}$ .; metaethylphenol is fluid at ordinary temperatures, but crystallizes at  $4^{\circ}\text{C}$ . and boils at  $214^{\circ}\text{C}$ ., its benzoate melts at  $52^{\circ}\text{C}$ . and boils at  $322-323^{\circ}\text{C}$ . The so-called alphaethylphenol is really the para compound, with which it is identical in physical characters.

**Tests for Nitrites.**—The substance known as indol, forms, it is said, a very sensitive and beautiful test for nitrites in waters. Professor O. Bujwid employs it in this manner: An alcoholic solution at 0.1 to 0.2 part per 1,000, is diluted with water. 10 cc. of water are taken and heated to  $70^{\circ}$  or  $80^{\circ}\text{C}$ ., along with a few drops of hydrochloric acid, and then a few drops of the indol solution are added. There at once appears a fine red color, which becomes rather deeper for a few minutes. It is so extremely sensitive as regards nitrites that the slightest traces of these salts in any of the reagents used must be carefully avoided.

**Saccharin and Potassium Chlorate.**—*The Chemist and Druggist* says: A French prescriber recently gave the following to a patient:

Potassium chlorate.....	5 grammes
Borax.....	10 grammes
Calcined magnesias.....	10 grammes
Prepared chalk.....	10 grammes
Saccharin.....	0.5 grammes
Oil of peppermint.....	2 drops

The pharmacist proceeding to dispense the tooth-powder mixed the chlorate and saccharin together in a mortar when a most violent explosion ensued, which shattered the mortar and did considerable damage otherwise. The prescriber has brought the matter before the Society of Therapeutics as a warning.

## Correspondence.

### Percentage on Prescriptions.

**Editor AMERICAN DRUGGIST:**

I have noticed that the subject of percentage on prescriptions is of late receiving some attention from pharmacists. This, in my opinion, is without doubt the most dishonorable and vile practice that a class of men calling themselves *men* could indulge in. It has become all but universal. It has got so that many "doctors" leave their formulæ with their particular druggists and simply prescribe "Jones' Tonic" or "Wells' Cathartic Capsules," and of course the victim (patient) must go to that particular druggist even if he has to pay 3 or 4 prices for the cheaply prepared compound. Now, percentage druggists, if you have any manhood left in you *stop it* and be an honor to our profession instead of a disgrace. *You know it is wrong!*

LIVINGSTON, MONT.

E. P. FERTE.

## Quiz Box.

*This series of questions will be continued each week. The answers to each series of questions will appear in their issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.*

*Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.*

*Address Editor Quiz Box, 37 College place, New York.*

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Hecbner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

### Answers to Questions; Eighth Series.

91. The following drugs of the order of Labiales are official in the United States Pharmacopoeia of 1890: Hedeomia, common in all parts of the United States. Leaves and tops are used.

Marrubium is a native of Europe but has been naturalized in the United States, where it grows wild. The leaves and tops are used.

Melissa is a native of the south of Europe, but grows abundantly in the United States. The leaves and tops are used.

Mentha piperita is a native of Great Britain, cultivated on the continent and very extensively in the United States, particularly in Michigan, New England, New York, New Jersey and Ohio. The leaves and tops are used.

Mentha viridis is a native of Europe but grows abundantly in gardens in the United States. The leaves and tops are used.

Salvia grows spontaneously in the south of Europe, and is cultivated easily in the gardens of the United States. The leaves are used.

Scutellaria, indigenous to America and found growing wild in most parts of the United States. The upper portion of the entire plant is used, avoiding the lower, woody parts.

92. The root of aristolochia serpentaria, Linné, and A. reticulata, Nuttall, grow in the shady woods throughout the middle, southern and western portions of the United States. It is a stimulant, tonic, diaphoretic and diuretic. Given in typhoid and intermittent fevers.

93. The root of polygalasenega Linné, is a native of North America; ranges north to Canada, south to North Carolina, and west to the Rocky Mountains. It is principally obtained from Kentucky, Tennessee, North Carolina, Arkansas, Missouri, Wisconsin, and Minnesota.

Senega is a stimulant, expectorant, diaphoretic and diuretic, and is used in the treatment of colds and for throat troubles.

94. The root of cimicifuga racemosa (Linné) Nuttall. It is a native of the

United States, growing in shady woods from Canada to Florida. It is a mild tonic, with the property of stimulating the secretions, particularly those of the skin, kidneys and bronchial mucous membrane. Has a sedative effect on the nervous system. Is used in rheumatism, dropsy, hysteria and various affections of the lungs.

95. The root of *eryngium aquaticum*, Linné. It grows in low, wet places as far south as North Carolina. It is diaphoretic, expectorant and in large doses emetic. When chewed, it increases the flow of saliva.

96. The root of *asarum canadense*, Linné. It is an indigenous plant inhabiting the woods and shady places from Canada to South Carolina. It is an aromatic stimulant tonic, with diaphoretic properties, sometimes used as a substitute for ginger.

97. *Mitchella repens*, Linné. It grows in various parts of the United States. The whole plant is supposed to possess remedial properties. It is reputed to be diuretic, tonic and astringent.

98. The root of *gelsemium sempervirens*, Persoon. Grows abundantly in moist soils along the sea coast from Virginia to Florida. It is a nervous and arterial sedative, sometimes diaphoretic in febrile diseases. In moderate doses produces agreeable sensations of languor. In large doses, dizziness, dimness of vision, dilated pupil, general muscular debility and universal prostration—reducing the frequency and force of the pulse.

99. The root of *althæa officinalis*, Linne. The plant is a native of Europe, where in many places it is cultivated for medicinal use. It is also found in the United States inhabiting salt marshes, the banks of rivers and other moist places. It is a demulcent.

100. The root of *chondrodendron tomentosum*, De Candolle. The plant is a native of the West India and South America. It is tonic, aperient and diuretic.

### Names of Students Whose Grade Stood 75 on the Eighth Series.

E. O. Answalt, Philadelphia.  
E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada.  
G. W. Barksdale, Richmond, Va.  
Miss Maude Florence Cain, Lancaster, Pa. Andrew Campbell, Williamsport, Pa. Chas. L. Chaplin, Minneapolis, Minn.  
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. W. H. DeCamp, Mount Morris, N. Y. T. J. Derrberry, Centerville, Tenn. Edward F. Deen, Lancaster, Pa.  
H. J. Force, Newark, N. J.  
William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.  
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.  
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.  
H. G. Lavalley, Gouverneur, N. Y.  
C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradley, Pa. John R. Murray, Centerville, Tenn.  
W. B. Nethery, Toronto Junction, Ont.  
Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.  
A. V. Rand, Wolfville, N. S. M. E. Read, Waukeon, Ohio.  
Aber V. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T. Albany, W. E. Smurl, Parsons, Pa. W. A. Sichel, Snow Shoe, Pa. W. W. Scott, Highland Falls, N. Y. W. Scallin, Mitchell, S. Dak.  
Lou Taylor, Greenfell, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.  
W. H. Van Strander, Winsted, Conn.  
Bertie Ward, Orange, N. J. Miss Emma A. Wiggin, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

### Questions; Eleventh Series.

#### PHYSICS.

References: Peck's Ganot's Physics, and the introductory chapters on physics in Fownes', Attfield's, Heebner's, Simon's or other works on chemistry and Oldberg's Home Study of Pharmacy.

121. What is the coefficient of expansion of gases; what space would 278 liters of oxygen at 0° C. occupy when raised to a temperature of 100° C., the pressure remaining uniform.

122. Describe a barometer, explain its construction, its action, and its uses.

123. In what way is the diffusion of gases shown and what relation does the rate of diffusion bear to the density of a gas?

124. Define and illustrate gravitation, cohesion and adhesion.

125. What are crystals, how do they grow and how are they distinguished from each other?

126. Give the names and characteristics of six principal groups or systems of crystallization.

127. Explain capillary attraction.

128. Explain osmosis and explain its use in separating different classes of bodies.

129. Give Sir Isaac Newton's three "laws of motion."

130. What is potential and what is kinetic energy?

### Approaching Pharmaceutical Meetings.

#### JUNE 5.

The Arkansas Association meets at Hot Springs. Secretary, J. W. Beidelman, Little Rock.

The Ohio Association meets at Cincinnati. Local secretary, A. Wetterstroem.

The Utah Association meets at Provo. Secretary, C. H. McCoy, Salt Lake City.

#### JUNE 12.

The Minnesota Association meets at Lake Minnetonka. Secretary, C. T. Heller, St. Paul.

The Missouri Association meets at Excelsior Springs. Local secretary, C. L. Cowens.

The Pennsylvania Association meets at Neversink Mountain House. Local secretary, J. B. Raser, Reading.

#### JUNE 18.

The Indiana Association meets at Evansville. Local secretary, George W. Haynie.

#### JUNE 26.

The New York Association meets at Saratoga. Local secretary, C. F. Fish.

#### JUNE 29.

The Maine Association meets at Portland. Secretary, Chas. A. Fowler, Bangor.

#### JULY 10.

The Virginia Association meets at Blue Ridge Springs. Local secretary, W. B. Spickard.

### New Jersey Pharmaceutical Association.

The twenty-fourth annual meeting of this association was called to order in the parlors of the Brunswick Hotel, Asbury Park, on Wednesday morning, May 23, with President Jones of Mount Holly in the chair.

Geo. E. Williams, secretary of the local committee, introduced Postmaster Har-

rison who extended a welcome on behalf of the mayor and citizens, which was responded to by W. C. Alpers of Bayonne, the secretary of the association.

The annual address of the president was then read and was referred to a special committee for consideration. Several committee reports were also submitted.

At the afternoon session A. S. Elwell of Bridgeton submitted his report as secretary of the board of pharmacy. During the year 11 meetings have been held by the board, 121 applicants registered on diploma, 98 applicants examined, of whom 40 passed and 58 were rejected. The total number of pharmacists registered up to date is 2,258, but as there is no re-registration there is no means of knowing how many there are still engaged in the pursuit of pharmacy.

Aug. Drescher reported as treasurer of the board showing receipts of \$653, and expenditure of \$543 during the year, a balance of \$110 being turned over to the association.

Messrs. Drescher, Thorne and Alpers reported verbally concerning legislation.

The following resolution was offered by Chas. Holzhauer and was passed:

*Resolved*, that in the opinion of this association it is inadvisable to enact any change in the existing law which would allow the physician to register without examination.

A general discussion on the subject of legislation was entered into and the pharmacy law [H. B. 202] which was introduced last year was read in full.

The bill was then taken up and read by sections and finally with a few amendments indorsed.

The bill as indorsed provides that no one shall be registered save by examination, that there shall be an annual registration fee charged of not more than \$3, and that the payment of this fee shall entitle the registrant to membership in the association. The bill also provides for registered assistants, who shall be required to have had not less than three years' experience and to pass an examination before the board.

H. J. Lohmann of Jersey City submitted his report as chairman of the committee on queries showing a deplorable lack of interest in this department.

The second day's session was opened with the reading of papers. The first subject presented was on "The Use of Asbestos Filtration," by H. J. Lohmann of Jersey City.

The second paper was: "Tablets and Tablet Triturates; Are They a Safe Form of Medication?" also by Mr. Lohmann.

The author called attention to the fact that there is a marked variation in the amount of pressure, exercised in pressing the mass into the molds by different persons and there is, therefore, a variation in the amount of the mass and, therefore, in the quantity of the active constituents present.

On examination these are found to vary very decidedly. Where compression is used, however, the results are found to be more uniform both in consistency and quantity.

On the whole the author held that this form of medication was inferior to powders, and it was to be hoped that they would not be introduced into the pharmacopœia.

In the discussion which followed F. M. Linette of Newark stated that he had found the use of some gummy substance of advantage in compressing tablets.

F. B. Kilmer of New Brunswick stated that it was almost impossible to obtain thoroughly accurate results if the ma-

chine is operated by hand, the movement being very uneven.

In the discussion which followed the second paper (see page 290) F. B. Kilmer testified to the practical value of asbestos in this connection.

As regards expense Mr. Lohmann stated that it was comparatively inexpensive. While the fiber in one pound boxes costs about 48 cents per pound it is very bulky, and but a small quantity is required for each operation. Moreover, it can be used over and over again by incinerating after use and washing thoroughly.

Papers by P. E. Hommel of Newark on the causes for the good effects of clove oil in toothache and on the new pharmacopoeia were read by title and referred to the publication committee.

A communication was read from Dr. Henry A. Coit as delegate from the New Jersey Medical Society, in which he regretted his inability to attend but recommending the appointment of joint committees by the medical and the pharmaceutical societies with a view to drawing up a code of ethics for the mutual relations of the physician and the pharmacist.

It was moved that the delegate to the Medical Society be empowered to act for the Pharmaceutical Association on such a joint committee should the Medical Society carry out the suggestion of Dr. Coit.

The committee on place of meeting reported through the chairman, H. O. Ryerson of Plainfield, submitting the names of Asbury Park and Newark without any recommendation as between the two. Upon vote Newark was selected as a place of meeting, the local committee being privileged to select some suburb of Newark if it should so desire.

E. A. Sayre, chairman of the committee on president's address, submitted a report indorsing the recommendations contained in that address.

Among these was a recommendation that resolutions of condolence be engrossed and presented to the family of W. M. Townley, the late treasurer and ex-president of the association, expressive of the sympathy of the association with the family in their loss.

A committee was appointed to offer some special reward for the member who procures the largest number of additions to the list of members during the ensuing year.

A number of committees and delegates were appointed. The report of the executive committee was submitted by G. W. Parisen and accepted.

H. J. Lohmann proposed an amendment of article 6 providing that nominations be made in open meeting instead of by a committee as heretofore. This took the usual course and laid over.

The applications of the following for membership were favorably acted upon:

Harry Wilford Crooks, Newark; Albert E. Gumbridge, Asbury Park; Peter J. Daly, Morristown; James T. Moorehouse, Orange; Geo. W. Walhauser, and Stephen B. Townley of Newark; Geo. W. Weber and Wm. F. Weber of Millville; Nelson F. Clayton of Cranbury; Eugene A. Sloat of Bayonne; Edward B. Oates of Paterson; Berthold J. Schreiner of Plainfield; Andrew A. White of Ocean Grove; Charles Wuenesch of Newark; Charles W. Dare, Harmon Dilks, Jr., Oscar K. Whipple of Bridgeton; Frank C. Stutzler and Arthur W. Wright of Newark; Louis H. Unbehau of Morristown; J. C. M. Markham of Jersey City; Sumter L. Beegle of Asbury Park; Frank H. Palardy of Kearney; James H. Best of Montclair; Charles H. Bye of Lakewood; James H. Terrill of Rahway; Henry Thornton of New York City, and John T. Britton of Long Branch.

The exhibitors present presented their thanks to the members for the courtesy extended them during the meeting and also extended through their spokesman special thanks to Geo. Williams as rep-

resenting the local committee. They also presented Mr. Williams a handsome table as a token of the appreciation of his efforts.

The report of the nominating committee was submitted recommending the following: President, G. W. Parisen of Perth Amboy; vice-presidents, C. F. Dare of Bridgeton and Stephen D. Wooley of Ocean Grove; secretary, W. C. Alpers of Bayonne; treasurer, Geo. T. Fitzgorge of Trenton.

Executive committee: C. F. Day, H. P. Thorn of Medford, H. O. Ryerson of Newton, H. P. Reynolds of Plainfield and Chas. Holzhauser of Newark.

Legislative committee, in addition to the board of pharmacy, Gilbert S. Cook of Somerville and George T. Fitzgorge of Trenton.

The following names were selected to submit to the governor of the State from which to select a member of the board of pharmacy to succeed August Drescher, whose term expires: E. B. Jones, A. M. Lienett, H. P. Thorn, Geo. F. Deacon and E. M. Wallington.

After the installation of officers the association then adjourned.

Among the visitors present were J. A. Hutchins, J. L. Hopkins, Otway Latham, M. Mandeldbaum, and J. S. Vanderbilt of New York City, W. M. Davis, Donald Cameron, and Prof. Schimpf of Brooklyn, and Miers Busch of Philadelphia.

#### Kentucky Association.

The Kentucky Pharmaceutical Association held its seventeenth annual convention in Paris commencing Wednesday, May 16, holding a two days' session. The meeting was called to order by President Robert Snyder of Louisville, and the welcoming address made by Mayor John Hinton.

Wednesday morning and Thursday afternoon were taken up by business sessions. The following papers were read: "The Proposed Tax on Alcohol," by G. Holzlauser, Newport; "Facts from the Prescription Files," by A. S. Porter, Somerset; "How can the Pharmacist Influence the Physician to write Prescriptions from the U. S. P., or National Formulary in place of ready-made Prescriptions?" by G. Holzlauser, Newport; "Local Organizations," by Addison Dimmitt, Louisville; "Glycerin of Commerce," and "Creosote of Commerce," by G. Holzlauser, Newport; "Syrup of Hydriodic Acid," by Oscar Dilly, Louisville; "The Microscope in Pharmacy," by Louis Rominger; "Artificial Effervescent Carlsbad Salts," by Charles I. Alvis; "Emulsion of Cod Liver Oil; how best made," by G. Holzlauser, Newport; "New Proprietary Articles," J. P. Barnum, Louisville.

Thursday morning the following officers were elected for the ensuing year:

President, Charles J. Clark, Paris; vice-president, W. A. Reynolds, Junction City; second vice-president, R. S. Hearne, Georgetown; third vice-president, J. F. Werner, Glasgow; secretary, J. W. Gayle, Frankfort; treasurer, Charles G. Martin, Parkland; corresponding secretary, E. B. Walthall, Horse Cave.

The association prizes were awarded to C. S. Porter and to Louis Rominger for the best papers on commercial and scientific topics respectively.

Strong resolutions were adopted against the proposed increase in the revenue tax on alcohol, and it was directed that they be sent to our United States senators at Washington.

The most important of all subjects before the association was the plan by

which it is proposed to more thoroughly introduce to the favorable attention of the medical profession the products of the National Formulary.

Some sixty preparations were furnished by different members in sample sized bottles and a special committee was appointed to attend the next meeting of the State Medical Society to distribute the samples and to call the attention of the physicians to the superiority of these preparations to the multitude of semi-secret and proprietary articles now flooding the market.

The following members attended the meeting:

Messrs. T. B. Satterwhite, E. Y. Johnson, J. W. Moore, J. P. Burnam, J. W. Fowler, Charles R. Morris, Oscar C. Dilly, Charles Rossehan, Charles R. Frick, Theo. Rectanus, Frank Lefer, Robert J. Snyder, M. Carey Pettie, Addison Dimmitt, Albert Schottlin, F. S. Snider, Dr. F. Kaufman and wife, John Colgan, Henry F. Cohn, Charles S. Wagner, of Louisville; Thomas J. Ballard, Lawrenceburg; C. A. Smith, Detroit; H. W. Grisato, Shelbyville; C. S. Porter, Somerset; John J. Reynolds, Flemingsburg; Harry S. Wood, Maysville; Oscar Small, W. C. Gran, Cincinnati; John S. Clark, Vanceburg; M. H. Webb, Louisville; W. A. Reynolds, Junction City; J. W. Gayle, W. S. Averill, Frankfort; Vernon Driskill, Ghent; W. S. Johnson, Henderson; E. W. Althall, J. S. Withers, Horse Cave; A. C. Hinderkoper, George S. Cullin, Pennsylvania; Benjamin S. Isaacs, New York; George Haberkotte, Cincinnati; G. Holzlauser, C. F. Keener, Newport; E. A. Bagby, Winchester, Robert G. Wray, Cincinnati; L. Robinson, Carlisle; D. R. Henderson, R. S. Hearne, Georgetown; Judson Pratt, Frank S. Praker, Matt Ellis, Cincinnati; T. Barclay Lee, Detroit; T. D. Ballard, Lexington; C. Louis Duke and wife, Louisville; J. H. Martin, Winchester; C. B. Whaley, Sharpburg; J. W. Keller, Cynthia; Henry A. Fabra, Augusta.

#### The Tennessee Association.

The ninth annual session of the Tennessee Pharmaceutical Association was held at Chattanooga, on May 15 and 16.

The first session on the opening day was devoted to routine business. The second session was called to order by President Burge at 2.30 P.M. The Hon. R. M. Barton, Jr., delivered an address of welcome which was replied to by A. R. Yager of Knoxville.

The election of officers was then entered into, the following being chosen: President, J. F. Voigt of Chattanooga; vice-president, C. M. Greve, Chattanooga, and James Thomas, Nashville secretary, Will Vickers, Murfreesboro; treasurer, Lewis Lauranson, Memphis.

The report of the secretary showed the following to have been elected to membership: J. T. Hargrove, Sam C. Davis, Nashville; J. H. Stevens, Knoxville; Chas. G. Kline, Harriman; C. A. Hudson, Medina; Syd. Houston, Wartrace; F. A. Moorman, Somerville; W. H. Gregory, La Fayette; R. B. Patton, Tracy City; B. M. Kinney, E. J. Schott, Nashville; C. L. Bradley, Clarksville; F. S. Stong, W. F. Plumb, E. J. Strecker, Chattanooga.

The association now contains over 250 members.

The legislative committee reported a resolution to the effect that the association favors an amendment to the pharmacy law by which the latter should be made effective throughout the entire State. The present law applies only to eleven of the larger towns.

The resolution was adopted by the association. The association also protested against the bill now in the House of Representatives seeking to raise the tax on alcohol from 90 cents to \$1.10.

The remainder of the afternoon was devoted to a discussion of proposed amendments to the constitution of the association.

The last session was held on board the



steamer Warner on the following day during an excursion on the river.

Interesting papers were read by C. M. Greve, Drs. Hagger and Moore, Prof. Ruddiman, of Vanderbilt University, and others.

The date of the annual meeting was changed from the third Wednesday in May to the third Wednesday in July. Monteagle was selected as the next place of meeting.

### The Florida Association.

The association met at the Inn, Port Tampa, on May 17. During the sessions A. E. Phillips of Sanford read a paper on the advantages of working in association, and J. M. Dixon of Titusville presented an interesting paper on the "Saw Palmetto," exhibiting specimens of fluid extracts, etc.

S. B. Leonard resigned his position as member of the State Board of Pharmacy after serving six years. A. E. Phillips was nominated to fill his unexpired term, and through the secretary Governor Mitchell was requested to appoint him, and also to reappoint Dr. Delouest on the board. An effort will be made to secure an annual interstate meeting of the associations of Florida, Georgia and Alabama, in order to awaken a livelier interest and to increase State pride in the work of the association.

The evening was devoted to a dance and reception.

### Commencement of the Buffalo College of Pharmacy.

The seventh annual commencement of the Buffalo College of Pharmacy occurred at Music Hall, Tuesday evening, May 1, in connection with the other departments of the University of Buffalo—the Buffalo Medical College and College of Dentistry.

The class in pharmacy numbered twenty-six, as follows:

Theodore V. Bauer, Edward E. Bickford, Emory H. Breckon, Birdall Briggs, Archie I. Drake, M.D., Walter M. Goff, Edward B. Grove, Fred. C. Haile, Arthur L. Hatch, George E. Herrmann, Louis D. Hilligass, Calvin D. Jefferson, George H. Jones, Robert E. Jones, Hiram E. Kendall, M.D., Claud D. McAhon, Guy L. McCutcheon, John V. Murphy, Charles E. Noble, Earle H. Parker, Orren S. Salisbury, Charles St. John, Ray M. Stanley, Leslie R. Stryker, Edward Volk, Grace E. Wilcox.

The honorary degree of Ph.G. was conferred on Wm. H. Peabody, Esq., of Buffalo.

The honor roll comprised the following:

George Hartwell Jones, Randolph, N. Y.; Frank Sanda, Cleveland, Ohio; George A. Heiser, Buffalo, N. Y.; Walter M. Goff, Howard, N. Y.; Claude Duval McAhon, Clermont, Pa.

The Wm. H. Peabody prize of \$50 was awarded to George Hartwell Jones. The faculty junior prize of \$25 fell to Edward Francis Kenney, Burton, Ohio.

It is worthy of note that Geo. H. Jones carried off the junior \$25 prize last year and has stood at the head of his class during the entire college course.

This commencement of the university was marked by the gratifying and unmistakable interest shown by Buffalo's best citizens, who thronged the large hall to almost its full seating capacity.

The address to the graduates was delivered by Dr. Lucien Howe of this city. It was crisp and bright and listened to with close attention and evident pleasure by the entire audience.

### THE ALUMNI MEETING.

The annual meeting of the Alumni Association of the College of Pharmacy was held in Alumni Hall of the University Building on Wednesday, May 2. The

morning session was taken up by business matters, the election of officers, committees, etc., for the ensuing year.

At the beginning of the afternoon session, the president, Wm. B. Reed, '92, delivered the address of welcome to the graduating class, which was responded to by Guy L. McCutcheon. The papers which followed, notable among which were, "The Trend of Pharmacy," by S. A. Grove, '93, of Little Valley, N. Y.; "The Precautions Observed in the Use of Poisonous Drugs at the Boston City Hospital," by R. F. Morgan, dispensing pharmacist, and the various topics which were introduced in an informal way, were all thoroughly discussed and the meeting was voted one of the most enthusiastic in the history of the association.

The result of the election was as follows: President, Fred S. Marsh, '89; first vice-president, Arthur S. Felch, '91; second vice-president, Miss Grace E. Wilcox, '93; third vice-president, John Fuhrmeyer, '89; secretary, E. J. Sanderson, '93; treasurer, Wm. H. J. Smith, '91; historian, J. Edward Smith, '88. Executive committee: Theodore V. Bauer, '94; Ray M. Stanley, '93; S. Hobart Dorr, '89.

The banquet at "The Niagara" in the evening (which included the following morning) was no exception to those uniformly pleasant occasions which are annually looked forward to with keen anticipation, and agreed by all participants to be "the" event of the year. As is the custom, the Erie County Pharmaceutical Association and the druggists of the city generally joined with the Alumni, the entire company numbering about one hundred and twenty-five.

President A. C. Anthony of the E. C. P. A. and President W. B. Reed of the Alumni Association presided jointly.

The following toasts were responded to, the speakers keeping the listeners in a happy and uproarious good humor until the last toast was given:

"Alumni Association," Wm. B. Reed; "Druggists' Opportunities," the Rev. Thomas R. Slicer; "The Municipality," John W. Fisher; "The Druggist up to Date," Dr. Wm. H. Heath; "The Druggists' Sway," R. King Smither; "The New York State Pharmaceutical Association," Dr. W. G. Gregory; "Legal Therapeutics," John Cunneen; "Class of '94," Dr. A. I. Drake; "The Retail Druggist and His Jobber," "Al" Walmsley.

### The Massachusetts College.

The twenty-sixth annual commencement exercises of the Massachusetts College of Pharmacy were held on the evening of May 23, at Association Hall, Boylston and Berkeley streets. The members of the graduating class wore caps and gowns for the first time in the history of the college. President Sawyer occupied the chair and introduced the speakers. Music was furnished by Henry's orchestra, and the hall was beautifully decorated with flowers for the occasion.

William S. Briry delivered the salutatory. Rev. Daniel Evans, pastor of the Congregational church, East Weymouth, delivered the address of the evening. His theme was that success and a liking for one's work must go hand in hand. He also made some patriotic utterances which pleased his hearers. The valedictory address for the faculty was ably handled by Prof. Julian W. Baird. James Cherry Fausnaught then delivered the valedictory address for the class, and Secretary Charles W. Williams

having called the roll, President William F. Sayer conferred the degrees of "Ph. G." upon the following:

Lewis F. Baker, John Ferrin, Alfred W. Balch, Adam T. McColgan, Albert H. Benhard, John A. McIntosh, Joseph Bergin, John A. Osgood, William S. Briry, Milton H. Plummer, Charles H. Cahill, Irving Nute, Frank H. Coffin, D. A. Roberts, John E. Crowdie, Chas. A. Stover, James C. Fausnaught.

### Massachusetts Alumni Dine.

It can be safely assumed that no annual event connected with the drug trade of the Hub and its surrounding cities and towns is looked forward to with more feelings of pleasure than the banquets and reunions of the Alumni Association of the Massachusetts College of Pharmacy.

This year's gathering, which was held at Young's Hotel on the evening of May 24, was no exception to the general rule, and despite the inclement weather which prevailed the alumnus rallied in generous numbers and the reception preceding the dinner was rich in reminiscence and memories of college days. Many of the wives or lady friends of the members were also present.

The members of the class of '94, a majority of whom were present, were the special guests of the occasion. New acquaintances were formed with the aid of the reception committee which consisted of W. D. Wheeler, W. W. Bartlett, M. L. H. Leavitt, J. S. Bonney and J. O. Jordan.

At 7.30 the company proceeded to the dining hall where the quantity of good things provided by the officers was much depleted. President Craig occupied the chair and at the close of the banquet initiated the oratorical exercises by speaking of the many changes which the past 24 years' history of the college had seen. He showed the progress which has marked the work there, and that to-day it stands second to none in the country.

He called upon the alumni to extend the work of the college to every State in the Union and then extended a hearty welcome to '94. He congratulated the members upon their choice of a profession which was a most honorable one; he cautioned them to be diligent and progressive; success was the price of honest industry.

The "College of Pharmacy" was responded to by President Sawyer who reviewed the work of the year and alluded to the standing of the college which he stated was in the first rank. He took occasion to thank the class of '93 for the handsome clock which that class recently presented to the college.

C. A. Stover, Ph.G., made an address for the class of '94. His description of the careful search of his books in the hope of finding something that would give him new inspiration as an orator produced much merriment. He urged all graduates to work for the advancement of the college, and closed by complimenting the faculty and trustees.

Dr. Greenleaf's speech for the faculty was an enthusiastic one. He outlined the work of the college and its recent advances, and spoke of the exhibit of U. S. P. drugs and preparations which the institution will have at the coming Massachusetts Medical Society meeting. He thought the requirements for admission to colleges of pharmacy should be raised, and closed with an appeal for greater familiarity with and purity in drugs.

Mr. Caswell, of the N. Y. C.P., followed. He stated that the best of feeling existed between the two schools and that they were both striving for a common end.

Three members of the class of 69, Messrs. Markoe, Hazeltine, and Warfield were present, and Mr. Doliber of that class arrived while Mr. Hazeltine was speaking, and was enthusiastically applauded as he entered the room. This was the first class graduated and all of the members present were called upon, and they related many facts connected with the early history of the institution.

Rev. Mr. Evans, of East Weymouth, was the closing speaker. Mr. Gridley, a humorist, enlivened the exercises of the evening by some capital recitations. Music was furnished by a string orchestra.

President Craig appointed the following committee to perfect arrangements for the twenty-fifth anniversary of the Alumni Association: J. O. Jordan, W. W. Bartlett, C. H. Packard, W. D. Wheeler and W. L. Scoville. Delegates to the A. P. A. are: W. L. Emerson, C. H. Packard, R. W. Greenleaf, J. A. Tailby and M. L. H. Leavitt. Committee on cabinet fund: E. H. La Pierre, C. C. Williams and R. W. Greenleaf.

Among those noticed were President and Mrs. W. F. Sawyer, Profs. Markoe, Baird, Greenleaf and Tucker, Prof. and Mrs. Scoville, Mr. and Mrs. Bartlett, Rev. Mr. Evans, Mr. and Mrs. G. M. Hoyt, Mr. and Mrs. M. L. H. Leavitt, Mr. and Mrs. F. H. Butler, A. K. Tilden, Thomas Doliber, C. B. R. Hazeltine, J. G. Godding, Mr. and Mrs. J. Allen Tailby, Pres. J. A. Rice, M. S. P. A.; Mr. and Mrs. S. S. Bradford, W. B. Shaw, W. E. Cates, F. P. Brooks, F. L. Decker, A. B. Warfield, D. A. O'Gorman, F. H. Carver and W. D. Wheeler.

### New York Notes.

The committee of arrangements for the annual meeting of wholesale druggists to be held in this city, October 1, has been added to by the members named as follows: Andrew B. Rogers, Jr., Jno. J. Riker, R. P. Rowe, S. W. Bowne.

Prof. F. J. Wulling, professor of pharmacy and dean of the Minnesota College of Pharmacy, expects to leave for Europe in the second week of June. He has undertaken the trip with a view of studying foreign educational methods in pharmaceutical institutions.

Among the best known tourists around New York State is L. E. Treat, who travels merely for his health, carrying as a side line Johnson & Johnson's red cross brand surgical supplies. Mr. Treat has just gone up to Binghamton. He will not be placed in the lunatic asylum but merely turned loose in the town. The druggists of Binghamton will please take notice.

The sympathy of many in the trade will go out just now to James Whitall of the firm of Whitall, Tatum & Co. of this city and Philadelphia, who has met with a sore affliction in the accidental death by drowning of his son Franklin. Franklin Whitall was one of a party of four Harvard students who lost their lives by the capsizing of their sailboat during a heavy squall on Dorchester Bay. He was twenty-two years old, and graduated from Haverford College last spring, and expected to graduate from Harvard this year. He was one of the original members of the old Young America cricket team, and was one of the most prominent cricket players in Philadelphia. He played fullback on the Haverford football team, and was a member of the college baseball club.

Wm. A. Gill of Columbus, Ohio, well known as a manufacturer of tin boxes for the drug trade, was in this city last week.

Mr. Vogeler of the Stein-Vogeler Drug Company, Cincinnati, O., was noticed among the visitors in the market last week.

Major Horner left last week for a short southern trip, stopping first at Fortress Monroe. He expects to be absent about one week.

Among the queer collection of stolen and confiscated goods in the private office of Police Inspector McLaughlin is a medicine chest containing six compartments, each with five small bottles from "Caswell & Massey." On the inside of this case, written in gothic text, was this stanza:

For every ill under the sun  
There is a remedy or there's none.  
If there's one try and find it;  
If there's none never mind it.

The sixteenth meeting of the New York State Pharmaceutical Association will be held at Saratoga Springs, beginning at three o'clock Tuesday afternoon, June 26, and continuing the 27th and 28th. The headquarters will be at the famous United States Hotel, where the sessions will be held. The managers of this hotel have made an extremely low rate of \$3 a day for this meeting. The entertainment committee cannot yet offer the detailed programme, but are planning to offer those who attend a delightful time among the characteristic attractions of Saratoga. They hope also to offer an unusual treat in the shape of a lecture from an eminent scientific authority. The local secretary, Charles F. Fish, Saratoga, New York, or Clay W. Holmes, Elmira, N. Y., the secretary of the association, will be glad to correspond with anyone wishing further information.

The regular monthly meeting of the Drug Trade Section of the New York Board of Trade was held on Thursday afternoon, with Chairman T. F. Main presiding. The attendance was large. On recommendation of Chairman Hartford of the membership committee the following firms were elected members: A. U. Andrus & Co., Geo. Lueders & Co., T. T. Grossmith, Dillon & Co., Edward Hill's Son & Co. and Johnson & Johnson. Chairman Plaut, of the legislative committee, reported tariff progress, and said that all of the 23 recommendations made in the recent memorial to the Senate were adopted, except the three which referred to alcohol, ether and milk sugar. The report was adopted. Mr. Main, the presiding officer, read a communication from Williams, Davis, Brooks & Co. of Detroit, directing attention to the law on shipping acids by steamer, and the matter was referred to the committee on jobbing druggists for investigation.

### Boston

E. F. Murphy was in Boston recently buying a stock for his new store in High street, Holyoke.

Eugene Sullivan, the well-known druggist of Concord, N. H., will open a branch store in Dover July 1.

Charles V. Royan will start a drug store in Hickey's new store on the corner of Hancock and King streets, Springfield. Mr. Royan was formerly clerk in Brewer's drug store.

A. S. Wetherell, who is vice-president of the New England Retail Druggists' Union and has supervision of the New Hampshire division, is at present engaged

perfecting organizations in the various counties of the State. A meeting of the Union was held in Concord during the month.

### Michigan Mention.

Frank Clemens, druggist, at Detroit, suffered a \$500 loss by fire last week.

Dr. P. W. Van Pelt has purchased the drug store of Felt & Cobb at Bellville.

J. M. Rathacer, Detroit, will remove his drug store to 712 Gratiot avenue, about May 1.

Dr. G. J. White of Jackson will occupy new quarters in the Michigan Central depot about May 15.

Arthur Mummery will open a drug store at Ann Arbor. He was formerly in the employ of Frank Inglis, Detroit.

Perry Weed has opened a drug store at Pontiac. He was formerly manager of W. D. Harshaw & Co. of that place.

Carbin's drug store at Battle Creek was robbed early last Sunday morning of a large quantity of cigars and other goods.

A disastrous fire recently gutted the principal business street of Davison. Among the losers was Thomas Dugan, druggist. Damage \$2,000.

Collins & Karner, druggists, at Blissfield, were burned out last week. Their entire stock of drugs and wall paper was destroyed. Loss about \$8,000; insured for \$4,500.

E. J. Kennedy, professor of practical and theoretical pharmacy in the Department of Pharmacy, Detroit College of Medicine, has resigned and taken up his residence in New York.

Last week the drug store of James Hodges, at Utica, was broken into, the safe blown open and all the money stolen. The thieves entered by smashing in a rear door. The charge of powder was so heavy that the safe door was blown entirely off its hinges.

Dr. M. Rockwell, Benton Harbor, a graduate of the '89 pharmacy class, University of Michigan, died last week of pneumonia, after a week's illness. He had recently purchased a new home, and had been married only a year. He was a member of the Modern Woodmen, Knights of Pythias, National Union and Masonic orders. The remains were buried at his old home near Carey Lake.

### Richmond News Items.

J. A. Garland, formerly with T. A. Miller, 5th and Broad, has gone to make his home in Petersburg.

Burglars entered the residence of E. D. Taylor of the Powers-Taylor Drug Co. and stole a valuable watch recently.

Burglars recently tapped the till of Druggist Geo. Turner, 25th and Main, getting away with \$12.

F. J. Glinn was recently married to Miss Jackson at the home of the bride's parents on North 5th street.

The Rocketts (or as they prefer to be called) Fulton druggists have adopted Sunday hours for keeping their stores open.

P. Wilber Chelf has purchased R. G. Gabell's interest in both the stores, one on 3d and Main and the other on Pine near Franklin streets, and will henceforth conduct them both.

Read the "trade notes" and the market review every week if you want to keep posted.

### The International Congress of Hygiene and Demography.

The eighth congress will be held in Buda Pesth from September 1st to September 9th, 1894. In the 19th Section (Pharmacy), the following are the officers: President, Dr. F. Jarmay. Honorary presidents: Dr. Arp. Bókai, Dr. Chrl. Kiss, Dr. Alb. Lengyel, Chl. Thán, Dr. L. Tóth, J. Török. Secretaries: Dr. S. Fischer, Dr. J. Kóssa, Dr. St. Moldodányi, A. Torok. The foreign honorary presidents will be elected by the executive committee as soon as it is known who of the foreign celebrities intend to take part personally in the Congress.

The following questions will be discussed ..

1. International pharmacopoeia.
2. Qualification of druggists (apothecaries).
3. System of control for the free establishment and control of druggist shops.
4. In what manner would it be possible to reduce the prices of medicine so as to make them cheap for the poorer classes, especially for the rural population.
5. Latest notes on the keeping and preserving of drugs.
6. The dispensing of drugs or medicines by physicians.
7. The proper regulation of state control over druggists' shops.
8. The sanitary evils arising from the selling medicines of which the composition is kept secret.
9. The definition of herbs and the anatomical parts of herbs, as contained in the pharmacopoeia.
10. The appropriate fitting up of the several parts of apothecaries' premises.
11. The comparison of the quantitative analytical methods, as contained in the different pharmacopoeias.
12. The rational denomination of new drugs.
13. The drugs of ancient and of present times.
14. Incompatible drugs.
15. Explosive compositions of medicines.
16. International unity for maximum doses.
17. Uniformity of the form of prescription.
18. Permanganate of soda as the antidote of phosphorus.
19. Should the apothecary be examiner of food, drink, and other articles of consumption?
20. Tokaj wine as a remedy.
21. Of the preparations of quinine and of the quantitative determination of pure quinine.
22. The newest apparatus necessary for the examination of drugs.
23. Introduction and making known of Hungary's medicinal plants.
24. The limits of sensibility in the more important reactions as prescribed in various pharmacopoeias.
25. The determination of all the active parts of the more important tinctures and extracts.
26. Color blindness among druggists and apothecaries.

### Boards and Associations.

**NEW YORK CITY BOARD.**—At the May examination the following applicants passed: Mark DeW. Benjamin, Chas. B. Prior, Chas. F. Bolduan, Frank J. Keller, Gustav Abbehusen, Nathan Nanmoff, Henry J. Kirchner. During the month thirty-eight pharmacists were registered and seven pharmacists were convicted and fined for infringements of the pharmacy law.

The next examination will be held Sept. 10 in the new College Building, W. 68th street near W. Boulevard.

**A LEAGUE BRANCH FOR WOBURN WINCHESTER AND STONEHAM.**—An association was organized by Secretary Reeves of Cambridge on May 22, at Winchester, known as the Woburn, Winchester and Stoneham Druggists' Association. Its officers are as follows:

President, R. C. Evans of Winchester; vice-president, W. F. Gordon of Stoneham; secretary, F. P. Brooks of Woburn; treasurer, R. F. Walton of Stoneham.

Directors: W. H. Weed, Samuel Highley, F. O. Covell, Gordon Parker and C. F. Jones.

The association adopted a constitution and by laws, and have appointed a committee of two from each place on price list. Resolutions were passed asking wholesale druggists to discontinue retail-

ing as a part of their business, and everything is in harmonious working order.

Secretary Reeves reports that he has also been working with the druggists of Waltham, Watertown, and the six Newtons to form an association, and expect to meet them as a whole soon.

**IOWA PHARMACY COMMISSIONERS.**—A change has been made in the requirements for admission to examination, requiring two years' practical experience in drug stores or three years in a college of pharmacy. Applicants over eighteen and under twenty-one who pass satisfactory examinations and have had two years' experience in drug store or college will be registered as assistants in pharmacy; these certificates will be exchanged for certificates of pharmacy when the person arrives at the age of twenty-one. The commissioners have divided the State up in three districts. Commissioner Howard takes the northern district, Commissioner Leland the central district, and Commissioner Pickett the southern. Examinations will be conducted at Des Moines, Oskaloosa, Hawarden and Sheldon, on the first Tuesday in each month.

**PENNSYLVANIA PHARMACY BOARD.**—The State Pharmaceutical Examining Board of Pennsylvania held an examination in the Girls' High School at Harrisburg, on Saturday, April 28, 1894.

Two hundred and seventy-two candidates appeared for examination, one hundred and sixty-five applying for registered pharmacists' certificates, and one hundred and seven for qualified assistants' certificates. One hundred and nine of the former and eighty-five of the latter class were successful. The next examination will be held at Williamsport in July. Applicants for examination should apply to the secretary of the board, Charles T. George, Harrisburg, Pa., after the middle of June, for the necessary blank form of application, and the exact time and place of the examination. Applicants should always state, when applying for blanks, for which certificate they wish to be examined.

**MINNESOTA COLLEGE OF PHARMACY.**—The following members of the senior class of the Minnesota College of Pharmacy have just completed satisfactory examinations and will graduate June 7, 1894: Miller T. Bolton, Alfred B. Hart, Enoch Haugbush, Theo. W. Havarka, Bernhard O. Leubner, Arthur Von Rohr. Specials who completed work undertaken: Lucy H. A. Blanchard, Loran C. Chapple, B.S. The following passed satisfactory junior examinations and are promoted to senior class: Robt. T. Burke, Dan. Farmer, A. H. Fjelstadt, W. C. Honey, A. H. Hillard, Alice Houlton, G. W. Iltis, John Nelson, J. C. Olson, Frank Repple, S. F. Sanderson. Specials: Fred. Sleight, W. W. Root.

### Organize.

The following has been issued by the president of the Mortar and Pestle Club of Rhode Island:

*To the Retail Drug Trade:*

Organize!!! Organize!!! Fellow pharmacists and druggists who have always been looked up to as leaders in your respective localities. Now is the time to call together druggists of your vicinity and organize, hold a conference inviting the wholesale druggists to convene with you, form a city or county club, get in every druggist, then join in a body the Interstate Retail Druggists' League, a national

league that is growing fast, but we want you, dear reader, to help us to cover the whole United States.

My dear fellow reader, just you take a half or whole day's outing among the druggists of your locality and have them sign a call to form a club, get all you can to sign, call the meeting, have the meeting, impress upon those that come the necessity of an organized effort to protect yourselves from not only the invasion of the cutter, if he is not already with you, but you need united action to uphold the standard and dignity of your profession, and remove the cloak that our certificates in many places are used as drachm shop cloaks.

But our principal aim at present is to prevent cutting each other's throats by the underselling of our neighbor in our lines; it is far better to take him by the hand and make a fast friend of him than an evil enemy, try it on, get them together, talk over trade matters, and how best to improve it, and also our present standing as professional men.

Look upward and onward to progress, not down to degradation and disgrace, now is the time, the iron is hot in the East. Now let us have the West to strike at and help us as they were wont to do only a year ago. Come out you brave drug men of the Windy City and have something but wind. Shall we have the support of the western cities as Cincinnati, Columbus, Indianapolis, Dubuque, St. Paul, Minneapolis, Kansas City, Omaha and San Francisco, that we must and shall have before we quit the game. I repeat, my dear reader, make a great effort to call a meeting after getting the signatures of the majority of your neighboring druggists, if first call should fail try again and you will have better success. My advice will be to report proceedings to drug journals only, have all your members read all the drug publications at hand and keep posted, we are on the right train, get on board before you get left.

Yours for profitable business,

A. O. HULL.

President Mortar and Pestle Club of R. I.

### An Indian Journal of Pharmacy.

The Calcutta correspondent of the *British and Colonial Druggist* says: It seems strange that while India should support five or six fairly flourishing medical journals it should not possess a journal devoted to matters pharmaceutical. One has just, however, been started in Calcutta on a small scale, giving as the fundamental of its *raison d'être* the want of some such improving influence, and suggesting the ultimate organization of a pharmaceutical society for India, as indicated last week. The venture has been promoted by an enterprising American M. D. who was lately employed as an analyst to the corporation of Calcutta, but who is now doing private work. The paper emanates from the establishment of a respectable firm of chemists, but it is, perhaps, unfortunate that it is thus identified with any one firm, as it cannot expect to obtain that measure of general support which would be accorded to an enterprising independent publication.

Patient (*feebly*)—Well, Doctor, how do you find me to-day?

Doctor (*cheerfully*)—Vastly improved. Your legs are still badly swollen, but that doesn't trouble me at all.

Patient (*sourly*)—No, I suppose not. It wouldn't trouble me, either, if your legs were swollen.

—Truth.

## Trade Notes.

Among the most delicious flavors of this season is the Red Messina Orange, which has recently been put on the market by Smith & Painter of Wilmington, Del. Write them for price list, for they have a number of very popular flavors.

If you want a bicycle, want a cheap one and do not care much about having the very highest polish, write to the John P. Lovell Arms Co., 181 Broad street and 147 Washington street, Boston, Mass., for their number 2 list of shop-worn and second-hand wheels.

The Crown Perfumery Co. of London, Eng., desires to state that a change has been made in the management of their American branch and all orders and letters should in future in every case be addressed to the depot of importation, 25 Elm street, New Haven, Conn.

Dr. J. M. Grosvenor, well known, in the trade as head of the firm of J. M. Grosvenor & Co., Boston, American agents for Konseals and the Konseal Filling and Closing Apparatus, is spending a few days in the city. He is accompanied by his son and is stopping at the Astor House.

George W. Sloan (Indianapolis) owns the Pharmacopolium. Harry Zimmer runs the Herbarium. Now, if some other enterprising druggist would christen his place the Chemicalorium, or the Medicinarium, or the Drugitatorium, or the Apothecarorium, we would be right in it.—*Indiana Pharmacist*.

Druggists who contemplate opening new accounts will do well to send their orders to C. G. Bacon & Co., wholesale druggists and manufacturing chemists, 20 College place, New York. C. G. Bacon & Co. are successors to the old-established firm of Frazer & Lee and have unusual facilities for filling all orders.

Andrew P. Preston of Portsmouth, N. H., is making his native town famous for the production of perfumed sachets. The *Rivermouth Sachette* is the leader. If you want to know all about these novelties write to A. P. Preston, Portsmouth, N. H., and mention this journal. See his advertisement in this issue.

The Adeps Lanæ Co., 99 Nassau street, New York, called attention in last issue to the withdrawal of a pamphlet treating of their "Adeps Lanæ N. W. K." This substance, it should be known, is the pure anhydrous wool fat from which the official "Adeps Lanæ Hydrosu" can be made by incorporating the necessary amount of water.

Newly Made Bride—Mamma says she does not think we will ever quarrel as she and papa do

Groom—Never, dearest.

Newly Made Bride—No; she says you will be much easier to manage that papa was.

Wilmot Castle & Co., 28 Elm street, Rochester, announce their willingness to supply pharmacists with interesting reading matter relating to their Arnold Steam Sterilizer. The Arnold Sterilizer is coming into extensive use on the recommendation of physicians, and druggists should prepare for an increased demand by renewing their depleted stock.

The Low Art Tile Company of Chelsea, Mass., have just placed in the new store of the Hudnut Pharmacy Company, No. 205 Broadway, New York, the largest and most beautiful fountain in the city, 24 feet in length, with a rich and decorative

counter of the same material—tiles. To druggists who have only read of the artistic work of this company, but have never seen examples of their work, this construction will be a revelation, and the decorative possibilities of this beautiful and enduring material will at once be recognized. It is only recently that the Low Art Tile Company have opened an office and showroom at No. 81 Church street, New York, where may be seen a most choice exhibit of their fountains.

Milk is one of the staple foods given to fever patients, but it fails in a large number of cases to nourish the patient. With Burnham's Clam Bouillon added you get a greater amount of nourishment than anything else. Besides it satisfies the hunger and containing as it does phosphorus, lime or sodium, builds up the system. Samples on application to the E. S. Burnham Co., New York.

## Lysol in a Dental Lotion.

F. T. Van Woert, M.D.S., of Brooklyn, N. Y., writes to the *Dental Cosmos*: Some weeks ago, while trying to manage a difficult case of pyorrhea alveolaris, I was seriously bothered in the removal of the deposits, in fact was about to give it up, when I was inspired with the thought that the mallet and chisel might help me out of the scrape, and upon trial found very satisfactory results. In thinking the matter over later I became convinced that the Bonwill mallet was just the thing for the purpose. After a trial I am thoroughly converted to the belief that this instrument, or one of the same principle, is the proper thing to remove these deposits, inasmuch as with a narrow chisel scaler you can chip off all the calcified matter on the roots without encroaching upon the periodontal membrane or alveoli. This is in accord with my theory that these parts should not be disturbed. The results have proven so satisfactory that I cannot refrain from writing you, that the profession at large may profit by the same. I beg as well to add the formula for a lotion which has given me the most pleasing results in the treatment of this disease:

Lysol.....f 3 i j  
Tinct. capsicum.....gtt. xv  
Tinct. iodine.....f 3 i

Sig.—Five drops in one-half glass of water used as a wash, in cleansing the teeth with a brush.

## New Digestive Combination.

Two preparations of more than ordinary merit have been recently introduced by the Cudahy Pharmaceutical Company of South Omaha, Neb., and 57 North Moore street, New York: Cudahy's Wine of Beef Peptone and "Cudahy's Lime Juice and Pepsin Comp." We have examined both preparations and find them to be excellent examples of modern pharmaceutical compounds. The first named is referred to as containing in each pint the nutritive properties of over 1 lb. of fresh beef; the beef is contained in its most easily digested form, and "Cudahy's Wine of Beef Peptone" should therefore prove very acceptable to invalids and others who require an easily assimilable tonic nutritive. "Cudahy's Lime Juice and Pepsin Comp." is the most agreeable fluid preparation of pepsin that has ever been brought to our notice. It possesses the deliciously penetrating odor of the lime in a high degree, exercising quite a stimulating effect upon the salivary glands, as all fruit acids

do. It is referred to as representing scale pepsin in the proportion of ½ grain to a teaspoonful. Thus a teaspoonful should be able to digest 1,200 grains of solid food. The makers state that Cudahy's Lime Juice and Pepsin Comp. will be found useful in conditions wherein an acid is relaxed and a tonic digestive is indicated. It forms a delightful drink with ice and sugar, and most refreshing when fatigued or overheated.

## Chemicals.

In their May circular the Roesler & Hasselacher Chemical Company, 73 Pine street, New York, state that one of the results of the dull business period is a general race of offering special inducements in the terms, such as discounts and freights. They state it as their opinion that this drift is not even in the interest of the buyer, for in the long run all such allowances must ultimately be paid for. Such usages only tend toward self-delusion, being besides a discrimination against the legitimate channels of trade. Special lines are referred to as follows:

Aniline oils and salt are lower. It is at present not possible to discern whether this further reduction is due to natural causes or is the result of manipulations by speculators.

Benzoic acid is gradually advancing to the level of the higher prices ruling abroad.

Oxalic acid is quoted abroad at 7½c. per lb. The market here, however, is still kept at lower prices by the cheap lots held by second hand.

## Review of the Wholesale Market.

NEW YORK, May 29, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

We are unable to report any increase in the volume of trade for the month thus far; on the contrary business is running far behind expectations. The present consumption is light and the future situation uncertain, so that all indications point to a quiet market during the summer months. In face of the limited demand the tendency of values is largely in buyers' favor, though the market is generally steady and we have few changes of a lower character to report. Opium continues unsettled, and is fractionally lower. Codeine has declined in sympathy with opium. Kino is higher. Cube oil is lower. Anise oil is firmer. Foreign morphine has sold at lower prices.

ADVANCED.	DECLINED.
Dragon's blood.	Norwegian cod liver oil.
Pilocarpine.	Codeine.
Gum kino.	Cocaine muriate.
Oil anise.	Cube oil.
	Opium.
	Gum chicle.

ALCOHOL has shown no important variation since last report. The Trust managers maintain their selling range at \$2.18 @ \$2.22 with the usual rebate allowed.

BALSAM COPAIBA has remained quiet with 33 @ 38c. yet the asking price.

BALSAM PERU has been in fair jobbing request, and we hear of numerous small sales at \$1.90; importers are quoting \$1.85 with some sales in a large way at this figure.

BARKS.—Cascara Sagrada continues very dull. Recent arrivals held at 5c., holders declining bids of 4½c.; old grades are still quoted 6c. and upward for prime. Elm continues steady at 10½ @ 12c. Sassafras is in less abundant supply and quoted steady 6½ @ 7c. for whole and cut and ground respectively.

CANTHARIDES continue dull, but there is no quotable change in values, 25 @ 26c. being the asking price for Chinese and 65 @ 77½c. for Russian.

CACAO BUTTER is meeting with about the usual amount of attention, and among other transactions we note sales of 4,000 lbs. at 32c. net cash.

CODKINE has been reduced 10c. per ounce, this action following lower prices for opium.

COD LIVER OIL, Norwegian, continues very quiet and prices are somewhat irregular. The general asking figure is \$26, though it is stated in the trade that this in instances can be shaded. The present cost to import is about \$24.

CUTTLE BONE, Trieste, continues to offer in a jobbing way at 9½c. and some holders are willing to part with their goods at a concession from these figures; values are unsettled owing to active competition among importers.

ERGOT shows no improvement either in the way of demand or prices. German (Russian) continues held at 22 @ 24c. and Spanish 25 @ 27c.

COCAINE MURIATE has declined to \$5.45 @ \$5.65 as to quantity, the leading foreign producer having dropped the price 50c. per ounce and quoting ounce vials \$5.45, halves \$5.50, quarters \$5.55 and eighths \$5.65; 100 ounce lots can be purchased 20c. less.

DRAGON'S BLOOD in small reeds continues very scarce and holders are quoting 60c. as an inside value.

MANNA, large flake, is about out of market and the small available supply is quoted 75c.; small is firm at 30c. @ 31c.

MENTHOL continues firm though without quotable change in price; sales are making within the range of \$4.75 @ \$5. The cost to import is said to exceed \$5.50.

OPIUM appears to be tending steadily downward and the market is in a dull and uncertain condition. There is an entire absence of speculative inquiry and recent concessions upon the part of holders have failed to stimulate the slightest demand. Natural in case lots may now be obtained at \$2.07 @ \$2.10, but there is little doing in this way, the current sales being confined to small jobbing quantities only, for which \$2.15 is generally required. Powdered continues held at \$3 @ \$3.10.

MORPHINE comes lower from the agents of foreign manufacturers. Five ounce packages are quoted \$1.80, ounces \$1.85, and eighths \$2.05. Domestic bulk, best brands quoted \$2, and eighths \$2.25 @ \$2.30.

PILOCARPINE, owing to scarcity, has been advanced, the quotation now standing \$37.50 per ounce. The available supply is exceedingly small and said to be entirely in the hands of one concern.

QUININE continues to meet with steady fair inquiry from consumers and the tone of the market is firm with all the indications favoring a further appreciation in values. Upon the regular terms 23 @ 23½c. continues the quotation for foreign, though in rare instances 22½c. cash might yet be done upon a firm basis. Manufacturers continue to quote 25c. and domestic bulk is held at 25 @ 26½c.

SENNA LEAVES continue in good jobbing request with Tinnivelly particularly inquired for; sales within the range of 5 @ 15c. as to quality.

TONKA BEANS, Angostura, continue in good jobbing demand and firm. We are reported sales in a large way at \$2.

VANILLA BEANS continue in good jobbing request and firm. Among the sales reported are 350 lbs. within the range of \$6.50 @ \$13 as to quality.

WAX, Japan, is in better supply and

with freer offerings the price has receded to 7 @ 7½c.

#### DYESTUFFS.

CUTCH is steady with a good distributive trade reported. Prime quality bales quoted at 5½ @ 6c., inferior at 4½ @ 4½c., block at 6 @ 6½c. and MM slab at 8½ @ 9c.

GAMBIER remains quiet and the inquiry is confined to small lots though prices are maintained with some firmness, 4 @ 4½c. being asked for store goods as to kind and quantity. From the wharf \$3.15 @ \$3.16 might be done in instances.

INDIGO is firm and in good jobbing demand, sales of Bengal at 90c. to \$1.50 as to quality and Madras at 40 @ 55c.

NUTGALLS, Blue Aleppo, are held at 13½ @ 14c. in a jobbing way though purchases of quantities can be made down to 13c.

SUMAC, Sicily, has declined and we now quote the range at \$70 @ \$75 as to brand and quantity.

#### CHEMICALS.

ALUM continues in demand, with numerous sales at \$1.75 for lump, and \$1.80 @ \$1.85 for ground.

ARSENIC, white, is maintained steadily at 3½c. with a moderate trade reported at this figure.

BLEACHING POWDER remains quiet, but prices are sustained at previous limits, say 2½c. for German and 2¼ @ 2½c. for English, as to quantity.

BLUE VITRIOL is meeting with about the usual amount of attention, with 3¼ @ 4c. asked for the small available supply.

CHLORATE OF POTASH remains quiet but steady at 13½ @ 13¾c. for German crystals and 13½ @ 14c. for English. Powdered is generally held at 14½c.

CITRIC ACID of domestic make may yet be obtained at 40½ @ 41c. in bbls. and kegs. Foreign competition is checked at this range, which represents about the cost to import.

CHLORAL HYDRATE, crystals, in bulk, is quoted by manufacturers at \$1.10 and crusts at \$1.07, but from second hands supplies are obtainable at about 5c. less.

NITRATE OF SODA continues quiet with spot goods held \$2.30 @ \$2.35 as to quantity.

OXALIC ACID, German, continues to offer at 6¼c., though 6½ @ 6½c. is asked in instances. For English up to 6½c. is asked.

QUICKSILVER may yet be obtained at 49 @ 50c., though the latter price is asked by most holders.

SAL AMMONIAC, white grain, continues very scarce, and 7c. is now considered an inside price for German. English is held at 6¼c. @ 7¼c.

TARTARIC ACID does not vary either in price or demand, and former quotations still rule.

#### ESSENTIAL OILS.

ANISE is doing better at primary sources, and prices have advanced here to \$1.60 @ \$1.65.

BAY is without quotable change.

Fritzsche Bros. of this city have issued an interesting circular relating to this oil, in which the statements of a competing firm regarding the relative values of low and high specific gravity oils are severely criticised.

CASSIA is slow of sale with nothing of interest to note.

CITRONELLA is steady at the recent decline to 25c.

CUBEB is easier and prices have receded to \$1 35 @ \$1.45.

CLOVE continues quiet and the market is easy at 50 @ 52c.

PENNYROYAL is jobbing fairly with best domestic bringing \$1.10.

PEPPERMINT is quiet and featureless, no business of consequence having transpired. Bulk continues held at \$2.30 @ \$2.60 as to quality and HGH \$2.90 @ \$3.

#### GUMS:

ALOES of the different grades continue to meet with a moderate jobbing inquiry at about the previous values.

ASAFOTIDA is held at full previous prices with, however, only moderate jobbing inquiry experienced.

CAMPOR is in steady moderate request with the current sales within the range of 38 @ 41c. as to kind and quantity.

CHICLE is easier and holders are willing to sell at 25c., trade, however, is not stimulated to any extent by this concession.

KINO is in very small supply and the price has been further advanced, the quotation now standing \$1.25.

SHELLAC continues dull at nominally unchanged prices though firm bids a trifle less would probably receive consideration.

#### ROOTS.

GOLDEN SEAL is in moderate demand, and firm at 21½ @ 22c.

HELLEBORE, white, has sold freely during the week; among other transactions we note sales of 2,000 lbs. at 4½c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

AGENTS WANTED calling on drug trade to sell my goods from catalogue, as a side line. F. N. Burt, manufacturer druggists' boxes and labels, Buffalo, N. Y.—23.

CORRESPONDENT able to take charge of correspondence with physicians; must have knowledge in pharmaceutical specialty line; state salary, experience, reference and full particulars. "Doctor," 382 H., care this office.

DRUG CLERK.—In Newark, N. J., second clerk; salary \$12 per week; permanent position; must be temperate, reliable and industrious; give age, experience and references; if single or married. Address "Permanent," Newark, N. J.

DRUG CLERK.—A good junior, speaking German and English, with first-class experience; no other need apply. Call at Schmidt's Pharmacy, 148 4th avenue, New York.

WANTED.—Traveling salesman to handle our goods as side line; large commission. Address Tanoline Mfg. Co., Hamilton, Ohio.—23.

A DRUG CLERK who has had some country experience, single or married (married preferred), can hear of a good position by addressing W. A. Demarest, 115 Fulton street, New York.

#### POSITIONS WANTED.

SITUATION WANTED by a reliable and competent pharmacist; registered in New York State; eight years' practical experience with the retail trade; strictly temperate and can furnish best of references. Address "Migraine," care of this office.—23.

RELIEF.—Probably you cannot afford a regular clerk, but you can a relief for an evening or two a week; write me and I will call; no estimates sent; if not already booked can connect at short notice; will oblige any evening, but regular dates are preferred; hours: from 7 P.M. Jas. M. MacDonald, 659 Degraw street, Brooklyn.—23.

DRUG CLERK.—Thoroughly competent young man, registered in Kings County and New York, seven and a half years' experience. At reference, desires permanent position. Address "Nelson," 165 2nd street, Brooklyn, N. Y.

DRUGGIST, married, long experience, English and German, registered New York, Brooklyn, New Jersey, wants position; city or country. "Steady," 2 Court street, Brooklyn.



**DRUGGIST**, graduate P. C. P., six and a half years' experience, wants situation; best references. "H. D. T., H., care this office.

**DRUGGIST**, relief; registered in New Jersey and New York; long experience; best references. "Bernard," Verona, N. J.

**DRUGGIST**.—Graduate; nine years' experience; prescriptionist; registered; excellent reference. Address "Sulfonal," H. M., care this office.

**DRUG CLERK**, 19 years, English and German; registered; references. "Drugs," box 165 H., care this office.

**DRUGS**.—Competent, reliable Ph.G., 10 years' first-class experience, 7 years with house, speaks German and English, desires position; reference. Address "A. X., 155 H., care this office.

**DRUGGIST**, graduate, wants permanent position; city or country; long experience; reference from past and present employers. "Permanent," 125 H., care this office.

**DRUGGIST**, junior; ten years' experience; thoroughly competent and reliable; good dispenser and salesman; good habits; age 30; highest reference. "Drugs," 411 Court street, Brooklyn.

**YOUNG MAN** (23), eight years' experience, Ph. G., regular manager in Pennsylvania, desires a position in Philadelphia; central location preferred; A1 reference. Address "Ph. G.," care of this office.

**POSITION WANTED**.—A young man 19 years of age would like a position in some good drug store where he would have the opportunity to become acquainted with the business; no salary required. Address S. A. Hamilton, 455 West 50th street, New York City.—22.

**WANTED**.—A position by a graduate of the N. Y. C. P.; New Jersey preferred; four and a half years' experience; can give good references. Address Box 136, Dover, N. J.—23.

**POSITION WANTED** by junior clerk, 4 years' city experience, speaking German and English; moderate salary. Address H. Osterman, 206 East 114th street.—22.

## BUSINESS OPPORTUNITIES.

**WANTED**.—A good location for a drug store; will anyone give me such information? Address H., 129 Ferry street, Troy, N. Y.—22.

**DRUG BUSINESS FOR SALE**.—No cutting; 2,000 inhabitants; country seat; will discount salable stock if taken immediately as present owner has other business that demands immediate attention. Ferguson's Pharmacy, Cooperstown, N. Y.—22.

**FOR SALE**.—About \$2,000 will buy the only drug store in a nice town of 1,000, with a surrounding territory of 5 miles north, 5 miles south, 10 miles east and 8 miles west; well stocked; cash trade; reason for selling, have two stores; a rare chance for a cash purchaser. Address "Oxalic Acid," care AMERICAN DRUGGIST.—20.

**FOR SALE**.—One of the best drug stores in Massachusetts; long established; always successful; splendid location; average sales for six years \$16,000.05; sales in 1893, \$18,484.28; rent \$1,200; soda sales will show profit exceeding the rent each year by over \$300; reason for selling, owner has other business which requires more time; price \$10,000; if you are looking for a good store it will pay you to thoroughly investigate this offer as this store has never been offered for sale before; if you mean business investigate; otherwise not; no brokers. Address "Good Offer," care this office.

**WANTED**.—The addresses of buyers of senega root. R. B. Taylor, Grenfell, N. W. T., Canada.

**FOR SALE**.—Physician's practice and drug store in a thriving town in Montana; physician's practice over \$3,000 a year; drug store stock about \$2,000. Address "A. T.," care of this office.—23.

**TO RENT** in Northampton, Mass., a corner store, new, never occupied, opposite the Academy of Music and Smith's College; 20 x 70 feet; just the place for a drug store; 1,300 college girls; population 15,000; price \$700. Address E. W. Higbee (owner) 81 Main street, Northampton, Mass.—21.

**FOR SALE**.—Drug store in a live Ohio town of 1,800 inhabitants, doing a cash business of \$6,000 a year; rent light; good reason for selling. Address—Box 229, Arcanum, Ohio.—22.

**FOR SALE**, a small, well-stocked and paying drug business on the east side of Bridgeport, at a sacrifice; good soda and prescription business; sales \$12 daily; double when times are better; must get out, so will sell cheap; inventory \$1,450; will sell for \$1,200 cash, or at inventory on easy terms. Address "Calcium," care of this office.

**BUSINESS OPPORTUNITY**.—A young, thoroughly competent business man of extended experience in the drug trade in all branches, with \$25,000, can secure substantial interest with manufacturing concern in staple line goods, large profits, \$40,000 invested in business, real estate; new capital to increase business only; to right party rare chance; give full particulars; references required and furnished; principals only. Address Capsiline, care this office.—22.

**DRUG STORE FOR SALE** in a New York State town of nearly 1,000 inhabitants; no other drug store within eight miles; rich farming country surrounding; doing a good business; price \$1,100; incorporated town; water works owned by village, etc. Address "Druggist," care of this office.—23.

**FOR SALE**.—Corner drug store, New York State; handsome fixtures; low, long lease; rare chance to quick buyer. Address Marsh, 87 Hamilton street, East Orange, N. J.—23.

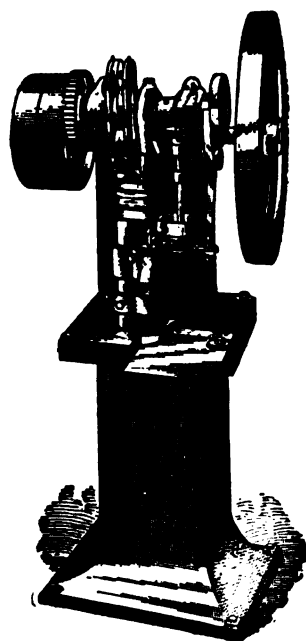
**I WISH TO EXCHANGE** gilt-edge improved property for cigar, candy or suitable stock for druggist. D. L. Hawkins, Mt. Vernon, N. Y.—23.

**DRUG FIXTURES FOR SALE** cheap, consisting of shelving (oak in sections), with drawers, scales, safe, showcases, shelf bottles, R. desk, soda counter, in fact a complete outfit for store excepting counters. Address R. L. Doty, Warren, Pa.—23.

**FOR FIFTY CENTS** I will send the formula for an elegant cologne very similar if not superior to Hoyt's German Cologne; can be cheaply and easily made. Send to Galen, Jr., 37 College place, New York.

**FOR SALE**.—\$1,500, terms easy, will purchase the only drug business in a good Connecticut shore town of about 3,000; this is a fine opportunity for a live man to make money; satisfactory reasons for selling. Address F. R. Russell, 69 Church street, New Haven, Conn.—22.

# SHOEMAKER — TABLET MACHINES.



"Size C."

The most complete Tablet Machines on the market; will accurately measure and compress tablets of any desired weight and diameter.

These machines are the simplest, strongest and most durable Tablet Machines manufactured; having no springs to get out of order, thus all motions are positive.

There are eight sizes of Shoemaker Tablet Machines:

"A" and "B" are hand machines intended for retail druggists.

"C" can be operated by both hand and power and is suitable for either retail druggists or manufacturers.

"D," "E," "F," "G," and "H" are power machines designed for manufacturers.

WRITE FOR CATALOGUE.

**ROBERT SHOEMAKER, Jr.** 215 RACE STREET, PHILADELPHIA.

## A REAL NOVELTY.

When a novel success is shown us we frequently remark upon its simplicity, and wonder the idea did not occur to us.

A Novelty to sell for twenty-five cents is being perfected by **PRESTON OF NEW HAMPSHIRE.—IT WILL BE A SELLER.** You will want to know about it early.

Watch our next ad. in this paper, and ask your jobber. In spite of hard times

**NOVELTIES WILL SELL.**

## CUSHMAN'S MENTHOL INHALER

— CURES —

**CATARRH, ASTHMA, COLDS, SORE THROAT; LAGRIPE, HEADACHE, NEURALGIA.**



The first inhalation stops sneezing, snuffing, coughing, headache. This relief alone is worth the price of the inhaler. Continued use will complete the cure.

Prevents Sea Sickness. The cool, exhilarating sensation following its use is a luxury to travelers by rail or boat. It is a dainty pocket piece; convenient to carry; cannot get out of order; does not require renewing; there is no liquid to drop or spill; lasts a year and costs 50c. at druggists. Registered mail 60c.; from

**H. D. Cushman, Mfr.,**

Satisfaction Guaranteed. Three Rivers, Mich



# American Druggist and Pharmaceutical Record.

## A JOURNAL OF PRACTICAL PHARMACY.

VOL XXIV. No. 23.

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THE meeting of the New York State Pharmaceutical Association this year bids fair to prove an unusually successful one. The place selected for meeting—Saratoga—offers many attractions to those who can take but one outing during the season. Every pharmacist in the State, whether a member or not, is cordially invited to attend, and is assured of a hearty welcome and an enjoyable visit. The United States Hotel will be the headquarters, and the first meeting will be on June 26. For further details address the secretary, CLAY W. HOLMES, Elmira, or Local Secretary FISH at Saratoga Springs.

### ATROPINE AND ATROPINE SULPHATE, U. S. P.

THE remarks by Mr. JOHN C. UMNEY on the U. S. P. tests and descriptions of atropine which were published in this paper last week have called forth a rejoinder from Dr. R. G. ECCLES of Brooklyn, chairman of the Section on Legislation and Education of the A. P. A., and of the Sub-section on Proximate Principles, Committee of Revision of the U. S. Pharmacopoeia, which is so complete and convincing a refutation of Mr. UMNEY's criticisms that we print it herewith in full.

In the May 31 issue of THE AMERICAN DRUGGIST you quote from the *Pharmaceutical Journal and Transactions* an English criticism of the atropine text of the new revision of the Pharmacopoeia. Following it you express the opinion that either the Revision Committee or the chairman of the sub-section on proximate principles should make an explanation.

The subject is certainly not sufficiently important for the committee as a body to take action thereon, nor are the objections so insuperable but that they can be readily met. Plainly stated they amount to the claim that the writer of the atropine text should have been endowed with prevision, and failing which the Pharmacopoeia must be found fault with. How could anyone reasonably expect the results of Schmidt and Schutte to be embodied in our work? The text complained of was partly written in the autumn of 1890. Schmidt and Schutte's work was unknown on this side of the Atlantic before 1891.

Is their work entirely reliable? Do we know that belladonna contains little or no atropine as such? Prof. Schmidt has not always proven trustworthy in his work. How many now believe with him that there are only two midriatic alkaloids? Has not Ladenburg completely driven him to bay on scopolamine? Who knows what may yet be the fate of his claim that atropine does not pre-exist in belladonna? Mr. Umney is entirely too dogmatic when on the strength of Prof. Schmidt's claims he asserts that our definition is inaccurate. Even if he is proven correct, on what reasonable grounds could he expect us to know of that work or of its reliability in time for our issue? Unless Prof. Ladenburg's suggestion that atropine is like racemic acid, a mechanical combination of two oppositely optically active bodies, it scarcely seems reasonable that it should not be found in quantity except in the ripe seeds of belladonna.

In the revision of the Pharmacopoeia of 1880 the melting point given for atropine was that of Ladenburg. Dr. Squibb and

others pointed out that 114°C. was too high. On actual trial no sample could be found on the market answering to this requirement. Hoping to avoid a repetition of this criticism a number of samples of both imported and domestic atropine were tried and all of them melted at or near 108°C. If Mr. Umney is correct then we have no atropine in the United States. At least none has been found and publicly reported upon.

I do not, however, believe he is right. Flückiger tells us that dried atropine melts at 115°C., but that the same atropine will fuse under boiling water, i.e., at 100°C. Dr. Squibb found that atropine began to melt at 104°C. and finished at 118°C. The writer has found that when atropine and many other alkaloids are melted over a bath the temperature of which is slowly rising, their fusing points are usually raised and some of them to an enormous extent. When, on the contrary, they are subjected immediately to a temperature high enough to melt them, they melt much lower than under the former condition. Drive off all moisture and slowly drive off the water of crystallization and a much higher melting point results.

The presence of impurities and of other alkaloids likewise influence results. No one can yet tell when we have a perfectly pure atropine. Ladenburg took one gram of hyoscyamine from twenty grams of what he had every reason for believing was a perfectly pure sulphate of atropine. If he cannot tell a pure article of this kind surely neither Mr. Umney nor Prof. Schmidt can. This being the case how can we tell the melting point of the pure article, or how can Mr. Umney assert that the requirements of the Pharmacopoeia in the forming of a gold salt are those of pure atropine only?

The trouble with Mr. Umney is that he wants us to evolve perfection out of a subject yet fraught with confusion, doubt and contradiction. Chemical accuracy is no doubt desirable, but it is quite certain that the amendments he suggests would not secure it however certain he may be that they would.

### COCAINE IN TEXAS.

TEXAS is provided by law with more pharmacy boards than all the rest of the United States put together, and still Texas is not satisfied. The druggists of Dallas are making most vigorous efforts to have the sale of poisons surrounded with adequate legal restrictions. The following from RICHARD SCHWEICKHARDT of Dallas, will show how earnestly the druggists are opposed to the indiscriminate sale of poisons, and how keenly alive they are to the evils resulting therefrom. Mr. SCHWEICKHARDT says:

"We have no state law regulating the sale of poisons, nor has the State legislature provided for a State pharmacy board. The State has done nothing, neither has the county, and the only resort we have left is the city council. If for no other purpose than a hygienic and moral one, in order to save people from contracting a degrading habit that would lead them to perdition, the sale of cocaine should be ostracised.

The cocaine habit is incomparably more dangerous than the liquor habit. There are fully 500—I may, I think, say 600—people in Dallas afflicted with it, who had better be in their graves, and I do not know of exceeding one or two habitual drunkards in the city. Is not this alarming? From a professional standpoint, druggists who spend their lives in the research of medicine, to aid humanity, as most of them do, do not wish to sell cocaine or morphine in discriminately.

"Because the victims of cocaine are not so demonstrative as those of whisky, people do not seem to notice the ravages of the former. They do not seem to know that while the drunkard can be reformed, the cocaine fiend is a helpless wreck upon the strand of society. The victims of that drug, if we sold it to them, would come around at night and attempt to tear down our doors.

"At our association meeting recently it was reported that a party was peddling cocaine in the lower quarters of the city. What is more, this greatest enemy of society and friend of the madhouse is beginning to ravage the country. A representative of chemists who manufacture cocaine—a man who visits this section of the country—informs me that the consumption of cocaine in Texas has increased fully tenfold within the last two years, and that negroes are giving up snuff-dipping and taking to the cocaine habit. I could dwell on this to a much greater extent, but I think I have said enough."

It is possible that Mr. SCHWECKHARDT has over estimated the magnitude to which this evil has grown. We trust that he has, but there can be no question of the soundness of his reasoning as to the necessity of adequate restriction, and we hope that the efforts of the Dallas druggists will meet with success.

Written for the  
American Druggist and Pharmaceutical Record.

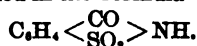
### SACCHARINE:

#### Its Manufacture and Uses in Pharmacy.

BY HUMES HALL, Ph.G.

The scientific name for saccharine is anhydrous benzol ortho-sulphonic imide or benzoic sulfinide. Saccharine is, therefore, as shown by its scientific name, not a carbohydrate, such as sugar is, but a derivative of benzoic acid.

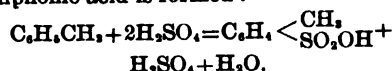
In its composition saccharine contains the following elements: carbon, oxygen, hydrogen, nitrogen and sulphur, which are combined in the formula



Saccharine is derived from coal tar, the elementary body or product of manufacture being toluene (toluol), a hydrocarbon which is obtained together with benzene or benzol, various other oils, and bituminous residua, in the fractional distillation of coal tar oil. Toluene is a volatile, colorless fluid of 0.86 specific gravity and of formula  $C_6H_5$ , is very mobile and transparent, smells slightly of benzene, boils at  $110^\circ C$ , is insoluble in water and alcohol, but dissolves easily in ether.

It may be of interest to give a short description of the various phases and processes toluene passes through and is subjected to, before it finally appears in the shape of saccharine.

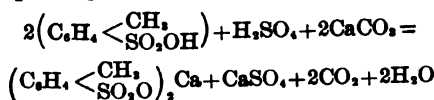
1. When toluene is heated with common sulphuric acid (not above  $100^\circ C$ ) toluene sulphonic acid is formed:



Toluene.

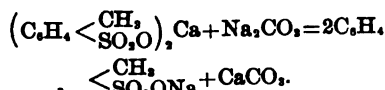
Toluene Sulphonic Acid.

2. The sulphonic acid thus obtained consists of three isomeric toluene mono sulphonic acids, the ortho, para and meta acids. The sulphonates are neutralized with lime and converted into the corresponding calcium salts.



Lime Salts of Toluene Sulphonic Acids.

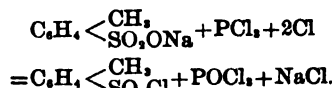
3. The calcium salts are converted by carbonate of sodium into sodium salts:



Sodium Salts of Toluene Sulphonic Acid.

4. The sodium salts in solution are evaporated to dryness, ground and dried.

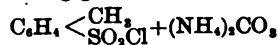
5. The dried sodium salts are converted into sulpho-chlorides by mixing them intimately with phosphoric trichloride and by exposing them to a current of chloride with thorough stirring:



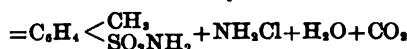
Toluene Sulpho-chloride.

6. The sulpho-chlorides are then separated by crystallization. The ortho-toluene sulpho-chloride, which alone furnishes saccharine, remains liquid and is separated by centrifugal machines from the remaining crystallized sulpho-chlorides.

7. The ortho-toluene sulpho-chloride is converted into ortho-toluene sulpho-amide by conducting gaseous ammonia over it:



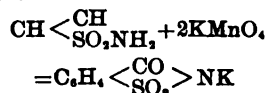
Ortho-toluene Sulpho-chloride.



Ortho-toluic Amide.

and freed from ammonium chloride by washing.

8. The ortho-toluic sulpho-amide is then converted by oxidation with potassium permanganate solution into the potassium salt of saccharine

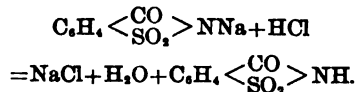


Potassium Saccharine.



and the latter is then separated from the eliminated manganese dioxide.

9. Precipitation is then effected by adding mineral acids and benzoyl ortho-sulphonic imide or benzoic sulfinide = saccharine is separated



Saccharine.

It will suffice to have explained the process of manufacturing saccharine in this brief manner.

So called "pure saccharine" which has been exclusively the trade article hitherto, is 800 times sweeter than sugar. It is not a single substance but a mixture of two kinds of benzoyl sulphonic imide. About 60 per cent. of the anhydride of the ortho with about 40 per cent. of the para and meta anhydrides, of which latter it contains a small quantity only. The ortho, combination alone possesses the sweetening power surpassing that of sugar by 300 times.

After many exhaustive experiments a method of manufacturing has been discovered, by means of which it is possible to separate the ortho compound from the others, and to produce on a large scale benzoyl sulphonic imide which is called "refined saccharine" and is 500 times sweeter than sugar.

It is of special importance that the benzoic sulfinide forms salts with the alkaloids in which the bitter taste of the alkaloids is lessened materially, and it is upon this point that saccharine is of great value to the pharmacist and physician as a taste corrective.

If an alkaloid be combined with saccharine in molecular proportions a salt of pleasant taste is obtained, the effect of which is the same in corresponding doses as that obtained of the pure alkaloid.

Ninety drops of a one per cent. saccharine solution conceal the bitter taste of a solution of one-third gram quinine sulphate completely and give an agreeable taste. Thirty drops of the same solution sweeten about one gram iron tincture, and twenty drops are necessary to conceal the salty taste of five to seven grams of potassium bromide.

Both pharmacists and physicians have long been searching for a spice possessing intense sweetness, a taste corrective, in short, and for this special purpose the extraordinary sweetness of saccharine can be turned to good account, as it can be used in connection with many substances, being incompatible with but few.

Tinctures, liquors, medicinal wines, extracts, pills, wafers, etc., may all be made palatable and administered as a pleasant medicine by the addition of a small percentage of saccharine.

#### Are Tablet Triturates and Compressed Tablets a Safe Form of Medication?\*

BY H. J. LOHMANN.

Among the newer additions of preparations we find Tablet Triturates and Compressed Tablets. Since their introduction the question has often been asked "Are they a safe and reliable form of medication?" I have devoted some time in making investigations of the tablets especially tablet triturates, with the following results:

Before proceeding I shall explain the processes of making the tablets for the benefit of those who have not had an occasion of seeing them made or making them themselves.

#### TABLET TRITURATES.

In preparing tablet triturates the active constituents are triturated with sufficient sugar of milk and then enough water, alcohol or other liquid excipient added to make a heavy pill mass. This mass is pressed into the molds and after partial drying removed from them.

We all know that no person will give the same pressure to one tablet that he will give to another and the consequence of it is there is a possibility of having as many

\*Read at the recent meeting of the New Jersey Pharmaceutical Association.

different strengths of tablets as there are tablets made at the time.

This fact has been demonstrated in a number of cases. Take, for instance, a bottle of tablets that you buy, no matter from whom, you will find some tablets ready to fall to pieces as soon as you touch them, whereas others are so hard that it is necessary to apply quite some force to break off minute particles. This is sufficient evidence of irregular division of the mass and naturally enough of an equally irregular division of the active constituents.

We will now consider the chemical compositions that are apt to take place. Take, for instance, a tablet consisting of calomel and sodium bicarbonate; this tablet will turn black almost immediately, demonstrating the reduction of the calomel. In fact all tablets containing mercury in any form are apt to undergo decomposition especially upon exposure to the atmosphere. Furthermore I cannot see how it can be possible that any person can place tablets containing substances containing mineral acid bases in vials with metal caps. Can it be possible that these people have ever studied chemistry or have they forgotten the fact that these bases bear a preponderant affinity for metals?

#### COMPRESSED TABLETS.

The process for making compressed tablets is more tedious and requires considerably more time and care, but the result is more satisfactory if the proper machinery is at hand.

The active constituents are triturated with sugar of milk or some other inert substance and formed into a heavy pill mass. This mass is reduced to granules which are allowed to become perfectly dry, this being done they are run through the machine into tablets of the required size.

I have had better results from compressed tablets than from tablet triturates, inasmuch that you can place greater reliance upon the exact contents of the tablets. Nevertheless you can never accomplish with either of them what you can accomplish with a powder or a solution, especially if the substance be insoluble or slightly soluble in ordinary liquids.

They are a convenient form of medication for vest-pocket practice, but they are not a safe medication, mainly on account of the uneven division of the medicaments, and it is to be hoped that they may never become official.

#### Dangerous Incompatibles.\*

The author cites a formula which it is dangerous to prepare and conserve, and in which chlorate of potassium is associated with sodium salicylate, powdered cinchona, and wood charcoal. The honorable professor recommends that the last three substances be first mixed, pulverizing the chlorate separately that it may be afterwards prudently mingled with the other ingredients, on a sheet of paper with the aid of a spatula.

He then passes to the permanganates, recalling the fact that the permanganate of zinc actually used presents the same danger as the permanganate of potash.

As a general principle, Prof. Jorissen declares that these compounds should never be associated with organic matter.

We should carefully abstain from triturating these compounds in the presence of organic products or reducing substances.

Care should be taken not to dissolve the permanganates in certain inflammable liquids, including glycerin, which has

been seen to give forth a flame in the presence of powdered permanganate. The danger is generally prevented by previously dissolving the permanganate in a sufficient quantity of water.

In pills the permanganate of potash should first be treated with white clay and anhydrous lanolin.

Chromic acid and bichromate of potassium are also stated to be capable of producing accidents in the presence of organic matter whether solid or liquid.

Next comes nitroglycerin, considered as a medicinal agent.

It should not be stored save in the form of dilute solution, 10 per cent. or 1 per cent., and in alcohol or in some fatty oils, and inclosed in little flasks protected from the action of light.

Never triturate this dangerous substance.

Resuming his investigation of incompatible medicaments, Prof. Jorissen cites several interesting prescriptions. He recalls an example quoted by Hager:

Nitric acid }  
Chloroform } ..... 5 drachms.  
Creosote }

M. To cauterize the interior of dental cavities.

If this mixture be prepared by placing these three products in the presence of one another, the development of heat, provoked by the reaction of the nitric acid on the creosote, suffices to volatilize the chloroform and cause breakage of the receptacle if the mixture be introduced into a bottle. It is accordingly necessary to add first the nitric acid to the creosote, introducing the chloroform into the vial when the mixture has sufficiently cooled.

Sulphuric acid is sometimes associated with turpentine essence and with fatty oil in veterinary prescriptions. A strong reaction here takes place. To prevent any accident, the acid should be mixed with the fatty oil and set aside. The reaction once completed, the essence of turpentine is added little by little under constant agitation.

This example recalls the following veterinary prescription:

Sulphuric acid.  
Tar.  
Bichromate of potash.

#### Mix.

In our first lessons in chemistry we learn that sulphuric acid and bichromate of potash are two substances which yield oxygen. In the preparation of the above mixture precautions should accordingly be taken. Pulverize the bichromate, add the tar, then little by little (under continual agitation with a glass spatula, and in a well ventilated place) add the sulphuric acid; set aside until a reaction is accomplished.

### Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Birney's Catarrh Remedy.** O. M.—We are unable to give a formula for this compound. The *American Practitioner and News* reports that Health Commissioner Reynolds of Chicago analyzed a sample of "Birney's Catarrh Cure," sold indiscriminately by many druggists. He found

four per cent. of cocaine in the sample, and adds that "the indiscriminate use of such a remedy is dangerous in that it may be used to excess, and then the dangerous properties of the contained remedy will become apparent. The amount of cocaine in Birney's Cure is sufficient to develop the cocaine habit when it is used persistently and in quantities."

**Ely's Cream Balm.** O. M.—There are a number of formulas extant which purport to produce a compound resembling the above named and we select the following from Kilner's formulary as a type:

Petrolatum..... 1 ounce  
Thymol..... 3 grains  
Bismuth carbonate..... 15 grains  
Oil wintergreen..... 2 minims

Dissolve the thymol in the oil of wintergreen; add the bismuth and incorporate the whole with the petrolatum.

**Chartreuse.** F. L.—The formula you quote is rather antiquated. Try the following:

Alcohol..... 6 liters  
Oil of angelica..... 1 gm.  
Oil of peppermint..... 2 gms.  
Oil of melissa..... 0.5 gm.  
Oil of hyssop..... 0.5 gm.  
Oil of cinnamon..... 0.4 gm.  
Oil of mace..... 0.4 gm.  
Oil of anassafras..... 0.5 gm.  
Oil of yellow sandal wood..... 0.5 gm.  
Oil of lemon thyme..... 0.5 gm.  
Oil of thyme..... 0.25 gm.

This solution of essential oils in alcohol may be made the basis of the three liquors known as white, yellow or green chartreuse. White chartreuse is made by mixing 5 liters of the above essence with 3½ kilos of white sugar dissolved in 2½ liters of water. Yellow chartreuse, the same as the above, tinted with tincture of saffron. Green chartreuse requires 7 liters of the essence and 2½ liters of water for the syrup. The green color is obtained by adding a sufficient quantity of tincture of spinach.

**To Restore Patent Leather.**—H. K. L. would like a formula to restore patent leather shoes.

If the japan is entirely worn off, there is no remedy for it. Cracks can be covered by applying a mixture composed as follows:

Ivory black..... 2 lbs.  
Powdered gum arabic..... 1 oz.  
Molasses..... ¼ lb.

Mix the powders and incorporate the molasses; boil well together, then let the vessel stand until quite cooled; after which bottle off. This is an excellent reviver, and may be used as a blacking in the ordinary way, no brushes for polishing being required.

**Crystalline.**—H. H. sends us a circular descriptive of Crystalline, a new tooth filling, and requests information as to its composition.

We do not know the composition of this particular Crystalline. There is a Crystalline in use by physicians as a succedaneum for collodion in cutaneous affections. It is a kind of collodion in which the ether and alcohol are replaced by methylic alcohol as a solvent. A modification of the formula has been proposed recently as follows:

Pyroxylin..... 1 part  
Methylic alcohol..... 4 parts  
Amyl acetate..... 14 parts

This is used similarly to the original crystalline.

**Books on Soap Making.**—"Sapo" asks us to publish the names of some recent works on soap making.

The latest work on soap making, and perhaps the only one dealing with the practical side of the art as practiced in the United States, is "American Soaps," published by Henry Gathmann, Chicago.

\*Prof. A. Jorissen, in *Journal de Pharmacie d'Anvers*. Through *Bulletin of Pharmacy*



The price is \$15, and the book can be had through any dealer. Brant's "Soap and Candles," published by Henry Carey Baird & Co., Philadelphia, is a cheaper work, but it is based on foreign methods which differ considerably from ours, as to raw materials, processes, appliances, and products.

**Brown Leather Dressing.** H. K. W.—The majority of leather dressing compounds differ in few particulars from good furniture polishes. A suitable preparation of this kind may be made by saponifying yellow wax with potassium carbonate dissolved in water, and incorporating a sufficient amount of turpentine to give fluidity to the compound. The dressing may be colored with brown aniline dissolved in turpentine, or annatto may be dissolved in the alkaline solution and the mixture colored in this way. We give a formula below:

Yellow wax..... 5 ounces  
Potassium carbonate..... 8 drams  
Yellow soap..... 8 drams  
Turpentine..... 2 ounces  
Water..... 12 ounces  
Aniline brown or annatto, sufficient to color.

## Correspondence.

### Valerian is Antedating.

Editor AMERICAN DRUGGIST:

The query of the Georgia Pharmaceutical Association, "Why is Valerian Antedating," was a query the printers would insist upon setting up as "Why is Valerian antidoting?" This query was published some four or five times in various daily papers, but in spite of corrected copy, "antidoting" it would finally come out. We flattered ourselves that anyone would understand so evident an error, and that the professional papers would know better, but we grieve to learn that you are "no better" than the unprofessional dailies in discerning our meaning. Above the paragraph of your poetical editor, in the May issue, I notice an apology for a printer's error, so you can appreciate how hard it is for the balance of us to avoid them. I am not particularly interested in valerian myself, but as the gentleman who offered the query used the word "antedating" I feel that he ought to be put straight before the public. Webster gives the noun antedate as meaning "prior date," the verb antedate as "to date before the true time."

GEORGE F. PAYNE, State Chemist.

ATLANTA, Ga., May 28.

### Percentages on Prescriptions.

Editor AMERICAN DRUGGIST:

The subject of percentages on prescriptions ventilated lately brings out a wrong that has grown to be serious. It is a fact that one-half the selling price is often given as a credit to the physician, thus making on an average prescription of 50 cents (which would cost 20 cents to put it up including the materials, bottle, cork, etc.) net to the physician 25 cents and to the druggist only 5 cents profit, or in other words 83 1/3 per cent. to the physician and but 16 2/3 to the druggist.

The time was when the druggist put up nearly, all the prescriptions, but now he has to sell the doctor about all his tablets and such as can be easily put up at a net cost nearly, and frequently has hints about a percentage on rubber goods, syringes and other articles sold to patients. It was not long ago when the writer heard a physician asking all the profits on his prescriptions.

X. Y. Z.

WATERBURY, N. Y.

## Quiz Box.

This series of questions will be continued each week. The answers to each series of questions will appear in their issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.

Address Editor Quiz Box, 37 College place, New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elizira" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

### Answers to Questions; Ninth Series.

#### POSOLOGY.

101. Dr. Young's rule, which is that most generally followed in determining the dose for a child, is to add the age to 12 and divide by the age, and divide the adult dose by the quotient. The adult dose being 60 and the child aged 18 months, the problem would be solved thus:  $12 + 1.5 = 13.5$ ;  $13.5 + 1.5 = 9$  v.  $60 \div 9 = 6\frac{2}{3}$  Ans. Of narcotics half this amount should be given and of laxatives double or treble the amount.

102. Tincture of gelsemium; dose, 5 to 20 minims, repeat every 2, 4 or 6 hours or until the sought-for effect is obtained. This would make the daily dose vary from a minimum of 20 minims to a maximum of 240 minims or four drachms, though in practice this latter is too high and had best be put at 3 drachms.

103. Tincture of aconite; dose, 1 to 5 minims, repeated every hour if necessary, or until effects are produced. One drachm might be given in twenty-four hours, although it is found that  $\frac{1}{4}$  to  $\frac{1}{2}$  drop of the tincture given every fifteen minutes produces more satisfactory results in many cases.

104. Fluid extract of cinchona; dose, 30 to 60 minims three times a day or from  $\frac{1}{4}$  to 3 drachms per day. To control the paroxysms of fever and ague it is sometimes given in much larger doses, as much as 8 ounces being given in an hour or two.

105. Oil of savin; from 2 to 10 minims every three or four hours, equivalent to an extreme dose of 60 minims per day.

106. Oleoresin of male fern; dose,  $\frac{1}{2}$  to 1 drachm is given in capsule, which dose may be repeated in 2 hours. Daily dose is thus from 1 to 2 drachms.

107. Extract of physostigma; dose,  $\frac{1}{16}$  to  $\frac{1}{4}$  grain every six hours, making the daily dose from  $\frac{1}{4}$  to 1 grain.

108. Oil of turpentine; dose, it will vary with the case, thus, in typhoid fever it is given 5 to 10 drops three times a day of 15 to 30 drops per day. In rheumatism 1 drachm every 4 hours or 6 drachms daily. For tape worm  $\frac{1}{2}$  oz. to 1 oz. mixed with equal quantity of castor oil.

109. Glycerite of carbolic acid; dose, 5 to 15 drops or 15 to 45 drops daily.

110. Solution of sub-sulphate of iron; dose, 8 to 6 drops; this dose may be re-

peated every 15 minutes until four doses have been given, or 12 to 24 drops per day.

So widely do the conditions vary under which drugs are administered, that "it is just as impossible to prescribe a dose that is adapted to every case, as it is to make a coat that shall fit everybody." (Hare.)

The doses given above have been compiled from several different sources, and where they have differed we have selected the smaller maximum as the safer dose to be given, so the error, if any, is on the side of safety, we believe.

### Names of Students Whose Grade Stood 75 on the Ninth Series.

E. O. Answalt, Philadelphia.  
E. O. Bailey, Bloomington, Ill. James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada.  
J. C. Boyer, Wiconisco, Pa. T. H. Brennanman, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstien, S. Dak.  
Miss Maude Florence Cain, Lancaster, Pa.  
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn.  
Edward F. Deen, Lancaster, Pa.  
H. J. Force, Newark, N. J.  
William E. Goksy, Bennington, Vermont. Max A. Goltz, Winona, Minn. Henry E. Garthoffner, Booneville, Mo.  
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Walter Hegeman, Rhinebeck, N. Y. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa. Arthur Hemage, Bradford, Pa.  
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.  
H. G. Lavallo, Gouverneur, N. Y.  
C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Brady, Pa. John R. Murray, Centerville, Tenn.  
Arthur Morin, Houghton, Mich.  
W. B. Netherby, Toronto Junction, Ont.  
Edward L. Page, Lancaster, Pa. P. H. Peters, Henderson, Mich. J. H. Pratt, Birmingham, Ala.  
A. V. Rand, Wolfville, N. S. M. E. Read, Wauseon, Ohio.  
Aber V. Smith, Clarksburg, W. Va. Clarence O. Snavely, Lebanon, Pa. Moses W. Somers, Boston, Mass. J. McDonald Scott, Chicago, Ill. S. M. T., Albany, W. E. Smuri, Parsons, Pa. W. A. Sichel, Snow Shoe, Pa. W. W. Scott, Highland Falls, N. Y. W. Scullin, Mitchell, S. Dak. Miles E. Smith, Lowell, Mass.  
Lou Taylor, Greenfield, N. W. T. Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va. Walter L. Tichenor, Brooklyn.  
W. H. Van Strander, Winsted, Conn.  
Bertie Ward, Orange, N. J. Miss Emma A. Wiggins, Exeter, N. H. Wood Wiles, Bloomington, Ind. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

### Questions; Twelfth Series.

#### CHEMISTRY.

References: Atfield's, Simson's, Heebner's, Roscoe's, Bartley's, or other chemistries, and Oldberg's Home Study of Pharmacy.

131. Explain allotropism and give illustrations of its occurrence.

132. Explain the uses of the terminations *ous*, *ic*, *ite*, and *ate*, and of the prefixes *mono*, *di*, *tri*, *tetra*, and *penta*, in chemical nomenclature, giving illustrations from medicinal chemicals.

133. Give a list of the elements with their atomic weights and symbols.

134. What are the characteristic distinctions between the metals and the non-metals?

135. Give a short history of the discovery of oxygen and its properties.

136. Describe the process usually employed for obtaining hydrogen, and write out the reactions occurring therein.

137. What is the principal source of sulphur, in what condition is it found in nature, and what is its most important commercial use?

138. What acids does phosphorus form, and how are they produced, and what are the distinctive reactions?

139. What are the halogens and what are their characteristics as a class?

140. How can you distinguish antimony from arsenic chemically?

### Approaching Pharmaceutical Meetings.

JUNE 12.

The Minnesota Association meets at Lake Minnetonka. Secretary, C. T. Heller, St. Paul.

The Missouri Association meets at Excelsior Springs. Local secretary, C. L. Cowens.

The Pennsylvania Association meets at Neversink Mountain House. Local secretary, J. B. Raser, Reading.

JUNE 18.

The Indiana Association meets at Evansville. Local secretary, George W. Haynie.

JUNE 26.

The New York Association meets at Saratoga. Local secretary, C. F. Fish.

JUNE 29.

The Maine Association meets at Portland. Secretary, Chas. A. Fowler, Bangor.

JULY 10.

The Virginia Association meets at Blue Ridge Springs. Local secretary, W. B. Spickard.

### The Interstate League.

The New York County Branch of the Interstate Retail Druggists' League held a meeting for the election of officers in their rooms in the Mott Memorial Hall 64 Madison avenue, at 3 P.M. on Friday, June 1.

There was a large attendance of members and the meeting proved very interesting.

A. M. Rontey submitted from the committee on nomination the following names for officers: President, C. S. Erb; vice president, T. J. Barnaby; secretary, T. O. Morrison; treasurer, M. F. Bender. Directors, Oscar Kress, Ernest Morwitz, O. C. Weinmann.

Mr. Erb exercised the privilege of a member to nominate from the floor and proposed the name A. M. Rontey as a substitute for C. S. Erb.

There being no further nominations the balloting for president was proceeded with and resulted in the election of A. M. Rontey by a majority of 13.

On motion of Mr. Breen the secretary was instructed to cast an affirmative ballot for the remainder of the names, and they were declared elected.

The officers elected are named below as follows: President, A. M. Rontey; vice-president, T. J. Barnaby; secretary, T. O. Morrison; treasurer, M. F. Bender. Directors, Oscar Kress, Ernest Molwitz, O. C. Weinmann.

A motion by Mr. Barnaby that the branch meet only once a month during the months of July and August was favorably received and adopted.

T. B. Breen then offered the following resolution:

"Moved that Mr. Rontey communicate with President Canning stating his views as to the means which in his opinion will be most likely to bring about the accomplishment of the League Plan and requesting the National body to issue explanatory circulars of the plan for distribution among the entire retail drug trade of New York City; this being necessary in view of the fact that very few of the members are well posted regarding the details of the league platform." This was promptly seconded by A. C. Searles and the motion adopted.

The secretary announced the forthcoming meeting of the New York State Pharmaceutical Association, which is their annual meeting and is held this year at Saratoga on June 26.

Mr. Breen suggested that delegates be appointed to attend the meeting of the New York State Pharmaceutical Association and proposed the following names:

A. C. Searles, Charles Osmun, T. J. Barnaby.

On motion the above-named members were appointed delegates as nominated.

An auditing committee was then appointed to examine the books of the treasurer and report. The members are J. M. Pringle, C. S. Erb and T. B. Breen.

The following new members were announced at this meeting: W. B. Parkins, 66th street and Columbus avenue, of Wm. B. Parkins & Co.; George E. Tappenden, 98 Columbus avenue, corner 64th street; Leopold Friburger, 1156 Second avenue; Mendel Zagat, 103 Ninth avenue; Julius A. Sachs, 137 Ridge corner Bridge; Pasquale Fellit, 2219 First avenue; F. A. Oettel, 2659 Eighth avenue; George B. Foster, 2225 Eighth avenue; A. Flagg, 1815 Third avenue.

The installation of officers will take place at the next meeting, which will be held in the Mott Memorial Hall, June 15, at 3 P.M.

### New York.

D. A. O'Gorman of the staff of the *New England Druggist* passed through the city this week.

Yancy Bartholow, vice-president of the Texas Drug Co. of Dallas, was noticed among the visitors in the city during the past week.

Theodore Schultz, a clerk in Dr. Becker's store at 118 Belmont avenue Newark, had a vigorous fight with a burglar on May 25. The burglar escaped but was arrested later.

Louis E. Braun, one of the oldest and best-known druggists of Elizabeth, died last week. He was forty years old, and was the son of the late Dr. Braun, once a leading physician in Elizabeth. He leaves a wife and son.

Wolf Tulchinsky, a druggist of No. 53 Canal street, was held for trial by Justice Hogan in the Essex Market Police Court, on May 29, charged with violating the pharmacy law in allowing an unlicensed clerk to put up prescriptions.

Mr. Matthews of Noyes Bros. & Cutler, St. Paul, Minn., and John A. Mahood, secretary and treasurer of the Piedmont Drug Mill Company, Lynchburg, Va., were among the visitors to the New York drug market during the past week.

Four-year-old Willie Cox, the son of James A. Cox, a druggist of 660 Atlantic avenue, Brooklyn, was run down and killed by a team of horses attached to a coach driven on May 30. The boy was riding on his bicycle, almost in front of his home, when the team of horses came along. He became frightened and by accident turned his wheel in the wrong direction, and the horses knocked him down and trampled upon him. The boy was taken to the City Hospital. He died while being carried into the building.

Dr. John J. Gannon, one of the apothecaries of Bellevue Hospital, died in that institution, May 23, aged forty two. Dr. Gannon had been for seven years connected with the hospital, and had been in the employ of the Department of Charities and Correction a score of years. He was a graduate of the New York College of

Pharmacy, class of '73, and also of the Bellevue Medical College.

H. W. Tempany, a druggist at the corner of Thirty-fourth street and Avenue C, Flatbush, has been arrested on a charge of using the mail for fraudulent purposes. He advertised pills for sale, and in every box was a ticket, which purported to be good for a chance at a piano, a house and lot, and several gold pieces. One of his customers in Chicago bought a large quantity of the pills in the hope of realizing something in the supposed lottery. On failing in this, she put the matter in the hands of the postoffice authorities. A detective was put on the case, and secured enough evidence on which to base a warrant for arrest. Tempany has been keeping out of the way of the officers, and it was only by an early morning call that Deputy Marshal Bliss was able to find him at home. In default of \$1,000 bail, Tempany was sent to jail.

### Boston.

A burglar got two dollars in a raid on A. P. Shelden's store at Wellsboro not long since.

J. W. Roberts of Godfrey & Roberts, Main street, Springfield, left town without any apparent reason. Later his brother received authority to settle up his affairs which seem to be in good order.

The question of granting sixth-class licenses in this State is being agitated with almost the same frequency and assiduousness that characterized the earlier part of the license season.

In Somerville, the settlement of this matter has attracted considerable attention. The subject was at first referred to a committee of three, and after many continuances, the committee reported two to one "leave to withdraw." On the acceptance of the report there was considerable discussion. Some of the aldermen who favored "acceptance" stated that while they were in favor of licensing a few druggists, they were opposed to permitting all to sell, but to discriminate between the good and the bad was an impossibility. This ground was also taken by the member of the committee who did not sign the report. On the other hand it was said that a few stores should be licensed, which would be in accordance with the views of the temperance people of that city; it was charged as well that the aldermen opposing the granting of these permits were insincere, in that before election they were pledged to grant permits to druggists who would use them rightly and legitimately. The result of the vote, however, is that no licenses are to be granted. The Braintree selectmen have granted a sixth-class druggists' license to W. A. Torrey. Amesbury's selectmen considered this matter at length and finally licensed all of the druggists doing business in that town. The selectmen of Avon advertised the applications of the two druggists who applied for permits, and then decided not to grant the same. A. C. Martin and Charles Freeman of Chelsea were given "leave to withdraw" their petition for druggists' license. Licenses were granted to J. A. Connolly, L. J. Hutchinson and Arthur M. Field of Waltham. At Whitman only one of the four druggists applied, and the selectmen followed their custom of the last three years and voted "no." At Newton druggists' licenses have again been brought pertinently to the notice of the aldermen. From Newton Upper Falls, in which place the aldermen refused sixth-class licenses, a vigorous

prayer was presented from 60 real estate owners and taxpayers, that they be granted the same rights as regards druggists' licenses, that are enjoyed by other sections of the city.

The medical residents of Nonantum, to the number of a dozen, and others who swelled the list to the number of 25, stated in a petition that in their opinion Joseph G. Kilburn was perfectly competent to have a license of the sixth class; they considered him a reliable druggist of good standing, doing a legitimate business and worthy of their indorsement.

All the petitions were referred to the license committee. On recommendation of the committee on licenses, Druggist Talbot of Cambridge was given leave to withdraw on his petition for a liquor license of the sixth class. The vote to withdraw stood 5 to 4. The selectmen of Wakefield received a petition signed by 400 people protesting against licensing druggists. A public hearing was then held, at which there was an attendance of 300, and a vigorous protest was made against granting licenses. The druggists were represented by counsel who argued that the desired permission should be given because there was no evidence that the law had been violated. By a vote of 3 to 2 the petitions were refused. Cambridge has made a new departure. A monthly report of the liquor on hand at every drug store is submitted to the board of aldermen, through the chief of police, and the condition of the premises reported. The monthly report recently presented shows the total number of gallons of liquor to be 706, all but a few gallons being whisky. On North avenue druggists have 60 gallons on hand. Two East Cambridge stores have 50 gallons each.

At the last examination of the Massachusetts Board of Pharmacy certificates were granted to Joseph A. Precourt, Frank W. Simard, Marlboro; Joseph Brin, Springfield; Harry B. Cleveland, Simeon A. Flynn, Oscar C. Gooden, John H. Blanchard, Boston; William S. Briry, Bath, Me.

One of the stores of H. S. Hardy, Tremont street, was burned out by our big fire. President Sawyer of the College of Pharmacy gave the sufferers from this fire and their attendants the freedom of his store and supplied their wants free. This store narrowly escaped being consumed, and in anticipation of what was supposed to be its fate, some of the more expensive goods were packed for removal. The store of J. J. Howe, Cabot and Tremont streets, which was also near the fire limits, was made the headquarters for newspaper men and physicians, the chairs being occupied about all of the time of the fire by accident cases.

President William O. Blanding of Providence, R. I., entertained several members of the New England Wholesale Druggists' Association at his summer residence, "Reka Dom," Rumstick Point, Barrington, on May 23. Among the Boston wholesalers present were Benjamin O. Wilson, Rueben L. Richardson, Charles A. West, E. W. Cutler, John A. Gilman, Fred. L. Carter, Charles F. Cutler, John G. Benedict, Charles C. Goodwin, M. W. Joslyn and George F. Kellogg. The Bostonians were captivated by the Rhode Island hospitality, which included a genuine clambake and fish dinner.

Secretary Reeves still continues his good work in organizing retailers. He formed a new association at Winchester recently, which is known as the "Woburn, Winchester and Stoneham Druggists' Association." Its officers are as follows: R. C. Evans, president, Winchester; W. F. Gordon, vice-president, Stoneham; F. P.

Brooks, secretary, Woburn; R. F. Walton, treasurer, Stoneham. Directors: W. H. Weed, F. O. Covell, Samuel Highley, Gordon Parker and C. F. Jones. They adopted a constitution and by-laws and appointed a committee of two from each place on price list; passed resolutions asking wholesale druggists to discontinue retailing as a part of their business, and everything is in harmonious working order. Let others do likewise. Mr. Reeves expects soon to form an association of the druggists of Waltham, Watertown and the six Newtons.

THE WASHINGTON STATE BOARD OF PHARMACY examined seventeen candidates for registration at the meeting which was concluded at Seattle on May 16, and granted licenses to several on certificates of other boards or on diplomas. The successful candidates are:

Pharmacists, Frank Chappell, Granite Falls; Carl F. Peterson, J. E. Quiett, Tacoma; Oscar Pucius, Seattle; Herbert W. Marr, Olympia; assistants, Edward Thomas, S. W. Powell, Fred. Cestigan, Charles Holcolm, Seattle; E. M. Taylor, Sidney; Herbert F. Faulkner, Ballard; A. W. Plympton, Tacoma; pharmacists by previous registration in other States, R. S. Davis, Woodland; F. L. Janek, Ph. G., North Yakima; F. O. Weygand, Ada, Minn.; Aaron Tilzer, Tacoma; James A. Watson, Spokane.

The members of the board present were President A. Morley Stewart of Tacoma, Secretary W. H. T. Barnes of this city, C. F. Krum of Spokane, L. D. P. Collins of New Whatcom, and C. G. Snyder of Davenport. The next meeting of the board will be held in Tacoma immediately prior to the assembling of the State Pharmaceutical Association in September.

Wilmot Castle & Co., manufacturers of the Arnold steam sterilizer, 28 Elm street, Rochester, have published some interesting and valuable literature on the feeding and care of children, which they will gladly furnish to any druggist making the request and mentioning this journal.

### The Acme Water Cooler.

Whitall, Tatum & Co., manufacturers of druggists', chemists' and perfumers' glassware, New York, Philadelphia and Boston, are introducing the "Acme Water Cooler" as illustrated herewith. The cooler consists of a glass jar (capacity one quart), which is inclosed within a double walled can, so constructed as to be a non-conductor of heat.



When the can is closed the temperature inside is kept almost unchanged for a considerable length of time. The makers state that ice placed in the jar will remain unmelted for many hours, and water may be kept perfectly cold all night.

The point is also made that owing to its non-conducting quality the can is well adapted for retaining the heat of broth, gruel or other food placed in the jar when hot.

The can is lined with zinc, the outside is handsomely japanned, and it is furnished with a folding handle so that liquids may be readily poured out without removing the jar from the can.

The price of the "Acme Water Cooler" is \$15 per dozen, from which a trade discount of 50 per cent. is allowed.

### A Valuable Book.

Dubelle's "Soda Fountain Requisites" is one of the most meritorious works of the kind published. It contains upward of 2,800 formulas, including new malt phosphates, foreign and domestic wine phosphates, cream fruit lactarts, soluble flavoring extracts, new modern punches, "Par Excellence" milk punches, "Nonsuch" fruit punches, delicious fruit meads, fruit acid solutions, new superior fruit champagnes, new fancy egg phosphates, exquisite fruit juice shakes, hot egg phosphate shakes, favorite wine-bitters shakes, soluble wine-bitters extracts, new Italian lemonades, exquisite ice cream sodas and non-poisonous colors. Additional information concerning the book is contained in the advertisement which appears elsewhere in this issue.

### The English Chemical Market.

In their May report S. W. Royle & Co., Manchester, are unable to record any improvement in the general chemical trade; the volume of business has continued to be unsatisfactory, apart from the disturbing effect of the Whitsuntide holidays. Caustic soda has only a moderate inquiry, and prices though nominally unchanged are on the easy side. Bleaching powder, however, is quite firm in price, and is indeed in rather short supply for early delivery; the exports, however, during April last show a further decline. Ammonia alkali is steady, and has a fair demand. Soda crystals and bicarbonate of soda are dull. Chlorate of potash is easier, and the small business doing is for early delivery. The board of trade returns for the four months ended April 30th last, as compared with the corresponding period of 1893, show in the exports of alkali a decrease in weight of 27,164 tons, and in value of £240,670, and in the exports of bleaching materials a decrease in weight of 6,518 tons, and in value of £60,802. In the tar products branch there is little of interest to report; somewhat higher prices have recently been paid for pitch, and the market is firm for the moment. Solvent naphtha also has a rather better inquiry; in creosote there is nothing doing at present; benzoles are quiet and just steady; carbolic acids are dull for the time of the year, and sales of the crude article are rather more pressed though quietly. Acetates of lime have more inquiry; prices are firmer, and appear likely to advance. Acetates of lead are dull, but unchanged in value. Acetate of soda is neglected, though very cheap at present. Sulphate of copper has been ruling steady, but is now easier and is quoted lower for delivery a little ahead. Carbonate and caustic potash are moving fairly well, and are quite firm. Borax is offering at low figures, but does not attract buyers. Oxalic acid is quiet, but steady. Yellow prussiate of potash has rather more inquiry.

### Notes on Prices.

#### CHEMICALS.

In the June circular of Powers & Weightman, manufacturing chemists, Philadelphia, declines are noted in citric acid, gallic acid, dilute phosphoric acid, carbonate of copper, ergotin, acetic ether, hydrogen dioxide, citrates of iron, iron phosphate, iron pyrophosphate, morphine sulphate, morphine acetate, morphine muriate, oil cubeb, potassium citrate, potassium phosphate, quinine and iron citrate, sodium citrate. Advanced: Mercury, veratrine, alkaloid and salts.

## Review of the Wholesale Market.

NEW YORK, June 6, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The opening of a new month always brings an increase in the number of jobbing orders, but this month we are unable to record any improvement in the volume of business either from the hands of importers or jobbing houses, the majority of buyers having apparently adopted the policy of operating with extreme caution, and only with a view of providing against present wants. The tendency of values is still largely in buyers' favor and some further important changes in prices have occurred, the most of which are of a lower character. Opium continues weak and unsettled. Quinine is firm. Salicin, salol, and salicylic acid have declined. Chloral hydrate and cocaine have both undergone a material reduction.

ADVANCED.	DECLINED.
Benzoic acid (German).	Celery seed.
Calomel (Howard's).	Chloral hydrate.
Menthol.	Cocaine.
Nitrate of soda.	Express almond oil.
Hempseed (Russian).	Salicin.
Simaruba bark.	Salicylic acid.
Mexican sarsaparilla.	Ipecac root.
Sal ammoniac, granulated.	American saf- fron.
	Balsam fir (Canada).
	Nutgalls.

ALCOHOL is maintained by the Trust at \$2.18 @ \$2.22, but there are rumors afloat of quiet shading in this market, some trust agents quoting \$2.04. Outside parties in Boston are quoting \$2.02 per gallon in lots of 10 gallons.

BALSAM COPAIBA continues in demand and prices are firm at the previous range.

BALSAM FIR, Canada, is in better supply and with freer offerings from primary sources buyers are proceeding cautiously. The current range is now \$2.85 @ \$2.90.

BARKS.—Cascara Sagrada continues quiet. Recent arrivals are offered at 4½ @ 5c., but for prime old 6c. and even a higher value is demanded. Simaruba is exceedingly scarce and the small available supply is closely concentrated and held at 30c.

BUCHU LEAVES, short, continue to offer freely at 8 @ 9c. as to quality, but a very limited inquiry is experienced.

CANTHARIDES continue quiet without however, any quotable change in price.

CALOMEL, Howard's English, has advanced in sympathy with the metal and 80c. is now demanded.

CHLORAL HYDRATE is affected with other chemical drugs, in which alcohol is used in the manufacture, by the change in the rate of duty from specific to ad valorem, and prices are lower. Manufacturers now quote bulk crystal 75c. and bulk crust at the same figure.

COCAINE MURIATE has declined an additional 70c. per ounce, the quotations of the market now being \$4.75 for ounces, \$4.80 for half do, \$4.85 for quarter do, and \$4.95 for eighth do. 20c. less can be done for lots of 100 ounces.

CODINE is steady at the decline, bulk being quoted \$3.90 and eighths at \$4.15.

COD LIVER OIL, Norwegian, is reported firmer, at primary sources but values here are nominally unchanged. The general asking price for spot goods is \$26 @ \$27.

CUBEB BERRIES are in good demand in a jobbing way with the current sales of or-

dinary within the range of 14 @ 15c. and XX 16 and 18c.

CUTTLE BONE, Trieste, continue to offer freely at 9½ @ 9¾c. Jeweler's is steady at 32 @ 42c.

ERGOT is meeting with about the usual amount of attention at 22 @ 24c. for German (Russian), and Spanish 25 @ 27c.

LYCOPodium continues in moderate inquiry but prices are steady at the previous range of 54 @ 56c.; the inside price can be shaded in some instances to 53c. for outside marks.

MANNA, small flake, has been inquired for and we hear of some sales of cases at 30c.

MENTHOL has developed a firmer tendency since the last report and we hear of nothing offering below \$5 at the close of the market.

OPIUM continues extremely dull with values nominal. The general quotation of the market is \$2.05 though it is the opinion of many in the trade that this price could be shaded upon a firm bid for quantities. There is little inquiry, however, of a legitimate or speculative character, and interest in the article seems to be suspended pending the result of tariff tinkering in the senate and information as to the probable output of the new crop. Jobbing parcels are held at \$2.05 @ \$2.07½. Powdered \$2.90 @ \$2.95.

QUININE continues in fair moderate inquiry and the market retains a generally steady appearance with foreign held at 22 @ 23½c. as to brand and quality.

SAFFRON, American, has further declined at 35 @ 37c. as to quantity, and the tendency appears to be toward a still lower range.

SALICIN, salol and salicylic acid have all undergone a reduction. Salicin is now quoted \$1.65. Salol in 100 lb. lots, \$3.05, and less quantities \$3.10 @ \$3.15. Salicylic acid has declined 15c. per lb., with the quotation now \$1 @ \$1.02 for bulk as to quantity.

VANILLA BEANS are moving out in a satisfactory manner and prices are firmer and higher owing to that and the reduced stock. The current sales are making at the range of \$6.50 @ \$13 for whole and \$5.25 @ \$8 for cut.

WAX, Japan, continues to offer at 7 @ 7½c. with, however, only a limited demand.

## DYESTUFFS.

CUTCH continues in steady, moderate request with prime quality bales bringing 5½ @ 6c. as to quantity and brand. Inferior goods may be purchased at 4 @ 4½c. Block held at 6 @ 6½c. and MM slab 8½ @ 9c.

GAMBIER remains quiet but steady at 4c. for steamer goods and 4½ @ 4¾ for sail as to quantity.

NUTGALLS, Chinese, have declined to 10½ @ 11c., but the distribution has not sensibly increased. Blue Aleppo continues quiet but steady at 13 @ 14c. as to quantity.

SUMAC, Sicily, is meeting with about the usual inquiry with the current sales at \$70 @ \$75.

## CHEMICALS.

ARSENIC, white, is maintained steadily, and a fair jobbing trade is reported at the range of 3¼ @ 3¾c.

BENZOIC ACID, German, is very scarce and the price of pound bottles has been advanced to 54c.

BLEACHING POWDER does not vary either in price or demand; German quoted 2½ @ 2¾ and English 2¼ @ 2½c.

BRIMSTONE, crude seconds, continues dull, but the market has a generally steady ap-

pearance. Stock in transit about due may be obtained at \$16.75, but forward shipments are not offered below \$16.50.

BLUE VITRIOL is in good demand and steady at the range of 3¼ @ 4c. The available stock is small, and prices are firm.

CHLORATE OF POTASH continues dull. German crystals are offered at 13½ @ 13¾c. as to quantity, and English, 13½ @ 14c. Powdered is quiet at 14½c.

CARBOLIC ACID does not develop any feature of importance. Crystals in bulk are jobbing fairly within the range of 13½ @ 16c. as to quality; bottles are held at 19 @ 21c.

CREAM TARTAR remains quiet but steady at 17c. for crystals and 17½c. for powdered.

BORAX continues inactive, but prices are maintained with a fair show of steadiness, and we quote refined Californian 8 @ 8½c. and City 8¼ @ 8¾c.

NITRATE OF SODA appears to be well sustained at the recent advance; trade requirements are light at the moment, and \$2.22½ @ \$2.27½ is quoted steady.

OXALIC ACID continues to offer at 7¼ @ 7½c. for English, and 6½ @ 6¾c. for German. The demand momentarily is confined to small jobbing orders.

PARIS GREEN.—Manufacturers' prices established on the 15 inst. are as follows: In arsenic kegs or casks, 23c.; kegs, 100 to 175 lbs., 23½c.; 14, 28 and 56 lbs., iron cans or boxes, net weight, 25c.; 2 to 5 lb. paper boxes, 25c.; 1 lb. paper boxes, 25½c.; ½ lb. paper boxes, 27½c.; ¼ lb. paper boxes, 29½c.

One to 5 lb. tin boxes put up to order at an advance of ½c. per lb. over paper boxes of similar sizes.

Terms—Payable July 1, 1894. Discount, 6 per cent per annum for unexpired time.

Rebates—To purchasers of 10,000 lbs. or over during the season, 3 cents per lb.; 4,000 @ 10,000 lbs., 2½c.; 2,000 @ 4,000 lbs., 2c.; 1,000 @ 2,000 lbs., 1½c.; 500 @ 1,000 lbs., 1c.

QUICKSILVER is held and selling moderately within the range of 49 @ 50c.

SAL AMMONIAC, white grain, is firmer in view of strong advices from primary sources. German is quoted 6½ @ 7½c. as to quality, and English 6½ @ 7c.

## ESSENTIAL OILS.

ALMOND OIL (Allen's expressed) has been reduced to 35 @ 37½c.

ANISE continues firm at the recent advance to \$1.60 @ \$1.65, though small quantities can be obtained in instances down to the point of \$1.50.

BERGAMOT continues to realize \$1.75 @ \$2.15 as to brand, and a moderate trade at this range is reported.

CASSIA is without quotable change. A fair jobbing business is being done at the range of 82½ @ 85c.

CYTRONELLA is maintained at the recent advance to 25 @ 28c.

CORIANDER is very firm in consequence of the advance in price of raw material. Holders are offering with some reserve at \$8 @ \$10.

CUBEB is given very little consideration, but prices are fairly well sustained upon the basis of \$1.35 @ \$1.45.

LEMON is held steadily with numerous jobbing sales within the range of 95c. @ \$1.35, as to brand.

PENNYROYAL is firmer. Domestic may yet be obtained in limited quantities at \$1, though some in the trade are quoting up to \$1.10 @ \$1.20, and are indifferent sellers.

PEPPERMINT is quiet, but the price is well sustained upon the previous basis of \$2.30 @ \$2.60 for bulk as to quality, and

**\$2.90 @ \$3 for HGH.** The reports from Wayne County are to the effect that the recent heavy rains in the growing districts have flooded the lowlands and injured the property for the growing plants.

#### GUMS.

**ALORS** are inquired for to a moderate extent and prices are fairly well sustained at the previous range.

**ARABIC** is without quotable change. The demand is wholly for small and unimportant quantities.

**ASAFETIDA** remains quiet; sales are reported of some 25 cases of good grade at 18c.

**CAMPHOR** is in moderate jobbing demand, with the range 38 @ 41c. as to kind, quantity and package.

**CHICLE** remains quiet at 25 @ 26c.; several jobbing transactions have taken place at the inside figure; it is unlikely, however, that prices will go lower, and a higher range may be looked for.

**KINO** is yet very scarce and high, \$1.30 being quoted for the limited quantity remaining in stock.

**SHELLAC** continues extremely dull, and prices are nominally unchanged.

**TRAGACANTH** continues dull with buyers having some slight advantage; Aleppo quoted 26 @ 54c. as to quality.

#### ROOTS.

**ACONITE** is well sustained at the range of 10½ @ 12c.

**CALUMBA** shows no change from 5½ @ 10c. as to quality.

**GINGER, Jamaica,** is in fair request and firmer with 13½c. now regarded as an inside price for common grades unbleached. For prime quality up to 14c. is asked.

**GOLDEN SEAL** is in small supply and maintained firmly at 21 @ 22c. as to quantity.

**IPPECAC** continues dull and the tone of the market is easier. Ordinary grades may now be obtained at \$1.20.

**JALAP** is dull but there is no effort making to urge sales below 19 @ 20c.

#### SEEDS.

**CANARY, Smyrna,** does not offer below 2½c.; the demand momentarily is light.

**CARAWAY, Dutch,** is quoted at 6¼ @ 6¾c., with jobbing sales at this range.

**CELERY** is dull, and nominally 16½ @ 18c.

**CORIANDER** is scarce and the small available supply is closely concentrated; held at 8¼ @ 9c.

**MUSTARD, yellow Californian,** is jobbing fairly at 3¾c.; brown held at 3¾c.

#### Looks for it Eagerly.

Please find check for journal one year in advance, which place to my credit with many thanks.

I eagerly look for it and I think it should be on the desk of all that wish to see our profession keep pace with the times.

C. M. PARRISH.

BELLEVILLE, PA.

### Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

**AGENTS WANTED** calling on drug trade to sell my goods from catalogue, as a side line. F. N. Burt, manufacturer druggists' boxes and labels, Buffalo, N. Y.—23.

**WANTED.**—Traveling salesman to handle our goods as side line; large commission. Address Tanoline Mfg. Co., Hamilton, Ohio.—23.

**WANTED.**—A drug clerk with 6 to 8 years' experience; location western New York State. Full particulars may be learned by addressing "Quinine," 202 Delaware avenue, Buffalo, N. Y.—25.

#### POSITIONS WANTED.

**DRUGS.**—Ph. G. and civ. licentiate with seven years' experience wishes steady position; city or country; best of references. Address Geo. C. Frolich, Mamaroneck, N. Y.

**WANTED.**—Situation by a drug clerk; five years' experience; best of references. Address W. M. Shoebottom, 34 East 12th street, City.

**SITUATION WANTED** as clerk in drug store, Arkansas preferred; have had four years' experience; best reference; can furnish a few hundred dollars if desired. Address "Phenacetine," care of this office.—26.

**POSITION WANTED** by graduate in pharmacy; registered in N. Y. City; speaks English and German; 10 years' experience; best of references. Address "Cocaine," care of this office.

**WANTED POSITION** in country town; 6 years' experience; registered N. Y. State board; temperate; good references; age 24. Address "Chinae," care of this office.

**POSITION WANTED.**—An experienced pharmacist, graduate of N. Y. C. P., and registered in several states, desires good position for the summer; Connecticut or New Jersey preferred; fully competent to manage, and an artist in preparing soda flavors. Address "Potash," care of this office.—23.

**RELIEF.**—Probably you cannot afford a regular clerk, but you can a relief for an evening or two a week; write me and I will call; no estimates sent; if not already booked can connect at short notice; will oblige any evening, but regular dates are preferred; hours: from 7 p.m. Jas. M. MacDonald, 659 Degraw street, Brooklyn.—23.

**DRUGGIST, junior;** ten years' experience; thoroughly competent and reliable; good dispenser and salesman; good habits; age 30; highest reference. "Drugs," 411 Court street, Brooklyn.

**DRUGGIST, relief;** registered in New Jersey and New York; long experience; best references. "Bernard," Verona, N. J.

#### BUSINESS OPPORTUNITIES.

**FOR SALE.**—One of the finest drug stores in a city of 20,000; 30 miles from Albany, N. Y.; \$3,000 will secure a bargain. Address "Menthol," care of this office.—25.

**FOR SALE.**—A first-class drug store, invoicing about \$5,000 in stock; has for years done the leading business in a town of 10,000 inhabitants and in 10 years its prescription file alone has reached 114,000, besides doing a large general drug business; a desire to remove West is the reason for selling. Address B. P. Steele, agent, Asheville, N. C.—24.

**FOR SALE.**—Corner drug store; returns at present \$30; fine soda fountain by Tuft; ice shaver, safe, cash register, fixtures and fittings all modern; cases white metal; fine location; no opposition to speak of; rent only \$30; natural gas only \$2.15 a month; no Pharmacy Law in this State; the above will be sold for \$4,000 cash; owner retiring. For full particulars apply "Pharmacist," 15 East Ohio street, Indianapolis, Ind.—26.

**WANTED.**—THE AMERICAN DRUGGIST for 1891 and 1892, complete; bound or unbound. Address, stating price, Geo. E. Grover, 23 South street, Waltham, Mass.—24.

**WANTED.**—The addresses of buyers of senega root. R. B. Taylor, Grenfell, N. W. T., Canada.

**WANTED.**—Advertising matter of any kind; circulars, bills, almanacs, samples of merchandise to distribute from house to house, tack up signs, lettering fences, bridges, buildings, etc.; do any advertising you want in the Connelville Coke Region; we make affidavit of work preferred; give bond and reference when required, send samples explaining nature of work required, for terms, etc. Coke Centre Advertising Company, P. O. Lock Box 66, Scottdale, Westmoreland Co., Pa.—23.

**FOR SALE.**—Physician's practice and drug store in a thriving town in Montana; physician's practice over \$3,000 a year; drug store stock about \$2,000. Address, "A. T." care of this office.—23.

**DRUG STORE FOR SALE** in a New York State town of nearly 1,000 inhabitants; no other drug store within eight miles; rich farming country surrounding; doing a good business; price \$1,000; incorporated town; water works owned by village, etc. Address "Druggist," care of this office.—23.

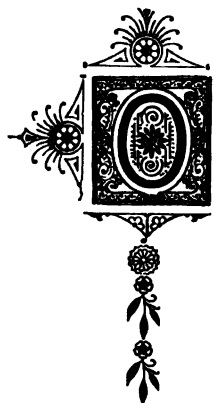
**FOR SALE.**—Corner drug store, New York State; handsome fixtures; low, long lease; rare chance to quick buyer. Address Marsh, 87 Hamilton street, East Orange, N. J.—23.

**I WISH TO EXCHANGE** gilt-edge improved property for cigar, candy or suitable stock for druggist. D. L. Hawkins, Mt. Vernon, N. Y.—23.

**DRUG FIXTURES FOR SALE** cheap, consisting of shelving (oak in sections), with drawers, scales, safe, showcases, shelf bottles, R. desk, soda counter, in fact a complete outfit for store excepting counters. Address R. L. Doty, Warren, Pa.—23.

**FOR FIFTY CENTS** I will send the formula for an elegant cologne very similar if not superior to Hoyt's German Cologne; can be cheaply and easily made. Send to Galen, Jr., 37 College place, New York.

**FOR SALE.**—\$1,500, terms easy, will purchase the only drug business in a good Connecticut shore town of about 3,000; this is a fine opportunity for a live man to make money; satisfactory reasons for selling. Address F. R. Russell, 69 Church street, New Haven, Conn.—22.



WING to an error of our publishing department a few numbers of a pamphlet, treating of our "Adeps Lanæ N. W. K.," have been distributed, the contents of which are not entirely correct.

Our attention has been drawn to this fact by the owners of the Adeps Lanæ patents, the Norddeutsche Wollkaemmerei und Kammgarncspinnerei zu Bremen, and in consequence thereof we hereby request the public to consider the pamphlet in question, whose distribution we at once inhibited, as canceled.

A pamphlet with a correct text is now in the hands of the printer and will be issued shortly

Respectfully,

**ADEPS LANÆ CO.,**

99 NASSAU STREET, NEW YORK CITY.

*Kindly mention this Journal when writing to Advertisers.*



# American Druggist and Pharmaceutical Record.

A JOURNAL OF PRACTICAL PHARMACY.

Vol. XXIV. No. 24.

NEW YORK, JUNE 14, 1894.

Whole No. 303

AMERICAN DRUGGIST PUBLISHING COMPANY,

37 College Place, New York.

A. R. ELLIOTT, President.

## SUBSCRIPTION PRICE.

For the United States and Canada, -	\$2.00
If paid in advance direct to this office, -	\$1.50
For Foreign Countries, - - - - -	\$2.50
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Special Rates for Cover and preferred positions will be quoted on application.

The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 37 College Place, New York.

It was not to be expected that a work of the magnitude of the Pharmacopœia could be entirely free from errors. Many of the statements contained in it are based upon the work of independent investigators, and it would be practically impossible for the Committee of Revision to fully investigate the accuracy of every statement made. So with regard to the solubility of the resin of the root of *Podophyllum Peltatum*, which J. B. NAGELVOORT makes the subject of a communication in a recent number of the *American Journal of Pharmacy*, in which he agrees with BERINGER that the

pharmacopœial figures for its solubility are in excess of the actual solubility, it can only be said that the official figures have been based upon erroneous data; and we should be grateful to Messrs. BERINGER and NAGELVOORT for directing attention to the error.

According to NAGELVOORT the average amount of matter soluble in boiling water is about 25 per cent. of the whole resin. This shows a marked difference from the pharmacopœial statement, which is to the effect that resin of podophyllum is soluble in 80 per cent. of boiling water.

According to our recollection the error originated with Professor MAISCH. It was continued in the National Dispensatory, but seems to have escaped the vigilance of the Committee of Revision.

## VASELINE vs. PETROLATUM.

THE physicians of the country are being supplied with another of the famous circulars which the CHESEBROUGH MANUFACTURING COMPANY distribute annually. The circular of this year, like all the circulars sent out by the CHESEBROUGH COMPANY, is an attempt to discredit the petrolatum of the U. S. Pharmacopœia and to influence physicians against prescribing or using it. The fact that many physicians are careful to specify "Petrolatum" in writing prescriptions is taken advantage of by the writer of the circular to say that the physician in doing so "allows the druggist to substitute for a pure and good petroleum product, the poor, and in some cases noxious material, which is sold under the name of petrolatum." This fling at rival makes of petrolatum will not make much impression on physicians; it is simply a tiresome refrain of what the Company has been preaching with so little success for the past ten years.

The estimation in which the CHESEBROUGH COMPANY holds the pharmacist is revealed in their statement that the information concerning petrolatum, which is contained in the U. S. Pharmacopœia, is incorrect and that pharmacists have neither the knowledge nor the ability to carry out the pharmacopœial tests. Some of the well known makers of petrolatum will perhaps make answer to the charge that "much of the material sold as petro-

latum is simply cut out from cylinder stock [Physicians all known what that is!] by oil refiners."

The circular goes on to state that "other makes [of petrolatum] are mixtures of distillates and wax, which are positively noxious and dangerous." The testimony of the CHESEBROUGH COMPANY alone will, however, scarcely be sufficient to convince physicians that the official ointment base is a substance unfit for medicinal use; they have been using it too long and successfully to be influenced against it by the unsupported testimony of a firm which is financially interested in a rival product. As to pharmacists, they are very weary of "vaseline," and the circulation of Col. CHESEBROUGH's literary efforts only adds to the sense of weariness.

## THE APPROACHING MEETING OF THE A. P. A.

SELDOM has the American Pharmaceutical Association selected a more charming location for its meetings than that chosen for the forty-second annual meeting, the first session of which will be held at the Battery Park Hotel, Asheville, N. C., September 3, 1894, at 10 A. M. The citizens of Asheville show a most commendable degree of interest in the approaching meeting and are making every effort to insure the meeting being a most brilliant success. A local committee have prepared and submitted to the council of the association an interesting programme which will no doubt be approved substantially by that body. At present the programme of entertainments may be outlined as follows, it being understood that this programme is tentative and subject to such modifications as circumstances may make necessary.

On Monday evening at 8.30 the citizens of Asheville will tender their visitors a reception and promenade at the Battery Park Hotel, and on Tuesday evening a literary and musical entertainment will be given in the hotel ball room. Wednesday afternoon will be devoted to a carriage drive to Vanderbilt's.

This is undoubtedly one of the most beautiful and picturesque drives in the United States. Leaving the Battery Park Hotel the visitor is driven down, into and through the city, by the Oakland Heights and Connally's, where magnificent views of the surrounding country are continually spreading before you, down and through the ford of the beautiful Swannanoa to the Vanderbilt estate.

Friday afternoon, September 7th, will be devoted to an excursion by special train to Hot Springs. Leaving Asheville, the train follows for 30 miles along the beautiful banks of the French Broad, between steep and precipitous hills, that finally shut off all view. As one looks ahead, he is at a loss to know where the river and railroad go to, but winding snake-like among the mountains, and sometimes almost doubling on themselves, river and railroad finally arrive safely at Hot Springs. Persons who have traveled have said that the ride along the French Broad River is unsurpassed in beauty by any similar river scenery in the world. At Hot Springs a lunch will be served, and several hours spent in viewing the hotel and grounds and the celebrated baths, which are famed the world over for their curative powers.

Returning to Asheville in the early evening the visitors will be in time for a late supper at their hotel.

Mr. WHITEFORD G. SMITH, the able local secretary, would like to have every one who contemplates attending answer the following questions:

1. What day and date will you arrive in Asheville?

2. How many rooms do you require at the Battery Park Hotel?

3. Do you prefer any other hotel or a private boarding house?

The details regarding transportation have not yet been arranged. Owing to the press of personal business, Mr. THOS. F. MAIN, the Chairman of the Committee on Transportation, has resigned and President PATCH has appointed in his stead CASWELL A. MAYO, 37 College place, New York City.

A private excursion is being organized in New England in which efforts will be made to interest all the New England members, and through this means it is hoped that an unusual large attendance from that section will be insured. Further details will be published from time to time or can be obtained by addressing any of the members of the Committee of Transportation or the local secretary, WHITEFORD G. SMITH, Asheville, N. C.

## THE NEXT BRITISH PHARMACOPŒIA.

PROFESSOR ATTFIELD has submitted to the General Medical Council his eighth annual report on the progress of pharmacy in relation to the future revision of the British Pharmacopœia. This report takes the form of a record of researches and suggestions bearing upon the articles of the Pharmacopœia. Comment is made on particular preparations or articles of the *Materia Medica*, but the subjects treated of belong, for the most part, to those which are of fundamental importance in the reconstruction of the official standard.

The extent to which manufacturing processes for official chemical substances should be retained in the Pharmacopœia is one of the fundamentals which receives attention, and the question as to whether or not the metric system of weights and measures

might further be recognized, as well as the advisability of the official adoption of some one of the various tables of atomic weights are fully discussed.

In a former reference to Professor ATTFIELD's sixth report (PHAR. RECORD, Vol. xxiii, 26) we explained very fully the plan pursued. The present report differs somewhat from the former, the references to details of pharmaceutical comment on particular preparations or articles of the Pharmacopœia as published during the year previous to its issue, being fewer in number, and, it appears to us, of less importance.

A page is given up to discussing the advisability of omitting *Acetum* from the list of official articles. *Acetum* has long been dismissed from the U. S. Pharmacopœia, and in the British Pharmacopœia it only finds employment in the preparation of a well nigh obsolete plaster, *Emplastrum Saponis Fuscum*, and here its function is the conversion of the oxide of lead into the acetate and the production of a brown color in the plaster mass. The process is criticised as one unworthy of modern pharmacy, and both vinegar and plaster, are deemed unworthy of retention.

*Aconitine* is given careful consideration, and Dr. ATTFIELD considers that in the next edition of the Pharmacopœia the alkaloid should be defined as crystalline. Commenting upon this the *Chemist and Druggist* hopes "that some further attention will be given to this matter before the suggestion is adopted."

An amended monograph on *Aqua destillata* is suggested for insertion in the next British Pharmacopœia. The suggestion is somewhat novel, providing for the use of potassium permanganate and an alkali in the still in order to destroy nitrites and insure the liberation of ammonia. To better illustrate the proposed change we reproduce the monograph below:

*Aqua Destillata.*  
Distilled Water.  
H<sub>2</sub>O.

Take of water a convenient quantity; place it in a still having an efficient condenser; add to it enough solution of permanganate of potassium rendered strongly alkaline by caustic potash to communicate a permanent purple tint; distill, and reject the distillate so long as it affords a distinct reaction with the alkaline solution of potassium-mercuric iodide; then distill so long as the distillate gives no reaction with the following tests, and collect and preserve it in stoppered glass vessels free from lead.

*Tests.*—A fluid ounce evaporated in a clean glass capsule leaves not more than a scarcely visible residue. In quantities of two or three fluid ounces it is not affected by sulphureted hydrogen either alone or after the addition of ammonia, by oxalate of ammonium, nitrate of silver, chloride of barium, solution of lime, or by a mixture of starch mucilage and iodide of potassium slightly acidified by acetic acid. It should cease to be used when a quantity of two or three fluid ounces gives more than a faint yellow coloration with the solution of potassium-mercuric iodide.

*Argentii nitras* and *arsenii iodidum* are quoted as examples of substances for which no method of preparation is necessary in the Pharmacopœia. Dr. ATTFIELD is of the same opinion as the chairman of our own Committee of Revision with respect to the educational value of a pharmacopœia. Where the preparation of

definite chemicals is concerned he is of opinion that the Pharmacopœia is no longer consulted for information regarding processes of manufacture and paragraphs of this description need no longer be retained in the Pharmacopœia.

The two official varieties of ether used respectively as a medicinal agent and for producing anæsthesia by inhalation take up a page and a half of the report. The purity of ether and the inadequacy of the British pharmacopœial characters and tests have been fruitful sources of controversy for some time back. An interesting paper on the subject by A. C. ABRAHAM, which appeared in the *Chemist and Druggist*, was reprinted in THE PHARMACEUTICAL RECORD of December 8, 1892, and it is extremely probable that the representations of this author, together with those of D. B. DOTT, who has also written on the subject, will result in raising the required specific gravity of *æther purus* from the present 0.720 to 0.724, the definitions and tests undergoing a corresponding change.

On the subject of weights and measures Dr. ATTFIELD adduces weighty reasons for the adoption of an alternative system of imperial and metric weights and measures as against the prevailing alternative "parts" system. The needs of Canadian pharmacists appear to be given due consideration, for he gives the following as a final reason for the adoption of the proposed alternative system.

It would seem, therefore, to be due to the Canadians that we should provide them in the next *British Pharmacopœia* with metric weights and measures side by side, or in close alternation, with the imperial weights and measures, in all the sections or monographs in which weights and measures are mentioned; in short, that we should provide them with alternative metric weights and measures in place of the present alternative *parts*, and generally make the alternation complete.

Dr. ATTFIELD then gives the following example of how the proposed extension of the metric weights and measures might be carried out:

[Present form.]

*Collodium.*

Collodion.

Take of

Pyroxilin, 1 ounce or 1 part.  
Ether, 36 fluid ounces or 36 fluid parts.  
Rectified spirit, 12 fluid ounces or 12 fluid parts.

If it were decided to displace the foregoing "parts" by weight and measure, by grammes and cubic centimeters, the following mode of doing this might be adopted:

[Suggested form.]

Take of

Pyroxilin, 1 ounce or 30 grammes.  
Ether, 36 fluid ounces or 720 cubic centimeters.  
Rectified spirit, 12 fluid ounces or 240 cubic centimeters.

The whole report is a remarkable example of what may be accomplished by observing orderly method in the collating of material of the kind which has been used in its preparation; it does not contain more than sixteen small pages, yet covers all the requirements of a report of its important character.

Written for the  
American Druggist and Pharmaceutical Record.  
**THE PRACTICAL USE OF THE  
METRIC SYSTEM.**

BY JOHN E. GROFF, PH.G.,

R. I. Hospital, Providence, R. I.

It is difficult to sum up all the advantages coming from the use of a system in which the measures of length, capacity, gravity and expanse are all directly related to one another, and from any given one of which, all the others may be derived. Such advantages do exist, however, and are constantly making themselves manifest to those individuals using the system.

More difficult than the summing up of those advantages by those persons who know them, is the task of unlearning the old systems by those who would learn the new.

There is a large class who, for various reasons, know little or nothing of the metric system and its practical use. Many, calling themselves good, hard-headed business men, without disparaging the system in any way, will leave it alone until fairly driven into contact with it, unless they see money in it. They have neither the time nor the inclination for a thing that does not pay. In endeavoring to give a few hints concerning metric weights and measures and their practical use, it will be taken for granted that the reader has, or will, inform himself as to the origin of the unit of the system, and is at least aware of the existence of tables of weights and measures, and of the terms expressive of their multiples and subdivisions.

In the U. S. Pharmacopœia of 1890 we find that the terms gramme (abbreviated Gm.) and cubic centimeter (abbreviated Cc.) are the *only* terms used. Furthermore we find by reference to the tables that there are a number of terms beside those just mentioned, which are *not* used in the Pharmacopœia. Let us consider *why* so many terms are given and so few used. In our system of money we have mills, cents, dollars, eagles and double eagles. A stock broker makes or breaks fortunes on the rise or fall in value of one *mill* per bushel of wheat. But although he owes so much to a *mill* per bushel, he never speaks of a mill by name. He says the tenth of a cent. Similarly he never speaks of eagles or double eagles, but applies the name dollar and numbers them by tens, hundreds and thousands. Just as in our monetary system we commonly discard the use of the terms mill, eagle and double eagle as being unnecessary and burdensome, so with the terms of the metric system, we reserve just those which are necessary to express such quantities as we ordinarily handle, rejecting, as liable to confuse, all the others.

If we were coal dealers we should find kilograms useful. If milk dealers, liters would be our measures, but as dispensing pharmacists, grammes and cubic centimeters are all we need. Ordinarily a physician writes for drams of solids and drams of fluids. The solids are weighed, the fluids measured. The *sign* used in both instances is the same, viz., 3 i. So also in the metric system, the cubic centimeter being the fluid measure of one gramme by *weight* of water, the same decimally written figure stands for either, as the case may be. Thus, by quinine—1. and water—1. we are to understand that one gramme of quinine is to be *weighed* and one cubic centimeter of water is to be *measured*. Grammes, then, and cubic centimeters are represented by the same

figures. A. B. Taylor of Philadelphia, in Oldberg's unofficial Pharmacopœia, suggested long ago, as a great help, the use of the terms grammes and fluid grammes, the same as we say *drachms* and *fluid drachms*.

In the fractional parts of grammes and cubic centimeters we also throw out as many terms as possible. We say milligrammes or milli-cubic centimeters.

In writing a prescription on the plan adopted in this country, of *weighing* solids and *measuring* fluids, abbreviations of the terms become unnecessary.

Morphine sulphate..... 1  
Water..... 30

M. ft. sol. Dose, 5 M.

Here we understand one gramme of morphine sulphate is to be *weighed* and thirty fluid grammes or cubic centimeters of water are to be *measured*. It is as easy, surely, to weigh one gramme as it is to reduce it to grains and weigh them, and it is as easy to measure thirty fluid grammes or cubic centimeters as it is to reduce them to fluid drams and measure them, for the adoption of the system as the official standard should be followed by all those calling themselves good pharmacists, supplying themselves with weights and measuring glasses to correspond. As soon as he has done this one great stumbling block has been removed, and he has no more *reducing* to do. There are two other difficulties. One is the trouble in learning to *think* in the new system; this is overcome by practice. The other is one which is likely to present itself to us for a long time to come, if not always, and that is that the common people who *take* the medicines will be directed to take them by drops, by teaspoonfuls, by tablespoonfuls, etc., etc. By *thinking* in the new system I mean that ability to tell by experience, how much we want. We say we want an ounce, or a pound or a pint of anything, because we are familiar with the bulk represented by those names. So in dosing, we understand that one grain is a certain small quantity and that  $\frac{1}{160}$  of a grain is a very small quantity, but when we are asked for a dose of one hundred and twenty milligrammes of quinine in thirty cubic-centimeters of whiskey, the figures have a dangerously big sound to the ear, for we are unfamiliar with them. There are two good ways to overcome this first difficulty. We *must* learn by heart a few comparative figures and then we must make use of some price list printed in the new system. Those of Squibb and Merck perhaps, one containing a price list at so much per Kilo, etc., and the other giving the doses in both systems, are two as good as can at present be obtained. I have found the following table of figures very helpful:

.061 (sixty-five milli-grammes)	= 1 grain, about
.065 (sixty-five milli-cubic centimeters)	= 1 minim, about
1. (one gramme)	= 15 grains, about
1. (one fluid gramme or one cubic centimeter)	= 15 minims, about
4. (four grammes) (of 15 grains each)	= 3 i., about
4. (four fluid grammes or 4 cubic centimeters of 15 minims each)	= 3 i., about
30. (thirty grammes) (of 15 grains each)	= 3 i., about
30. (30 fluid grammes or 30 cubic centimeters of 15 m. each)	= 3 i., about
500. (500 grammes of 15 grains each)	= 1 lb. Avoir., about
500. (500 fluid grammes or 500 cubic centimeters of 15 m. each)	= 1 pint, about
1000. (1000 grammes or 1 kilogramme)	= 2 lbs. Avoir. about
1000. (1000 fluid grammes or cubic centimeters or one liter)	= 2 pints, about

It will be noticed that the figures are not exact equivalents, nor is it necessary. That is not the object. When that great pioneer in good pharmacy, Dr. E. R. Squibb labels some of his preparations as containing *about* so and so, there is no inaccuracy implied. It is an honest acknowledgment that the nearest *practical* approach to perfection has been made. So with these equivalent figures, they are sufficiently near for all practical purposes. As an illustration I take the following figures from two works in wide circulation and of recognized authority.\* One gives approximate and the other accurate figures. One says morphine sulphate may be given in doses of one-eighth to one-fourth of a grain or .008 to .016 (eight to sixteen milligrammes). The other says from one-twelfth to one-half grain or .0064 to .0824 (five and four-tenths to thirty-two and four-tenths milligrammes). This latter would be something like saying from one-twelfth and four-tenths of a twelfth to one-half and four-tenths of a half grain for a dose.

See, too, how easy the fractional parts of a grain become:

1 grain being the same as .065 (65 millig'ms)	
$\frac{1}{2}$ " is $\frac{1}{2}$ of .065 which is .016 (16 " )	
$\frac{1}{4}$ " " " " " " " " .008 ( 8 " )	
$\frac{1}{8}$ " " " " " " " " .004 ( 4 " )	
$\frac{1}{16}$ " " " " " " " " .002 ( 2 " )	
$\frac{1}{32}$ " " " " " " " " .001 ( 1 " )	
So $\frac{1}{2}$ of a grain would be .032 (32 milligrammes)	
$\frac{1}{4}$ " " " " " " " " .016 (16 " )	

.001 (one milligramme) is the smallest metric weight which has a name. It is equivalent to  $\frac{1}{160}$  of a grain and is as small a quantity as we ordinarily use. Occasionally, however, we do run across substances given in smaller doses than that even. In such cases we speak of them as fractional parts of a milligramme, and write them decimally, leaving the decimal point to be understood.

For instance, atropia is dosed at .0006 to .0012— which we read  $\frac{6}{10000}$  to 1 and  $\frac{12}{10000}$  milligrammes.  $\frac{1}{10}$  of a milligramme is  $\frac{1}{10}$  of  $\frac{1}{160}$  of a grain or  $\frac{1}{1600}$  or  $\frac{1}{160}$  of a grain.

Duboisine is given in doses of from .0002 to .0004—two-tenths to  $\frac{1}{10}$  of a milligramme. Two-tenths of a milligramme is  $\frac{2}{10}$  or  $\frac{1}{5}$  of  $\frac{1}{160}$ , or  $\frac{1}{800}$ . Four-tenths twice that much, etc.

Remembering by a not very great effort the above approximate figures; frequently consulting some price list printed in the metric system; granted a desire to be up to date on all the requirements which go to make up a ready pharmacist, and I know from experience that it will take but a short time for anyone to become practically familiar with the seeming puzzles of this system of weights and measures. I append several examples. The first one showing the necessity of being able to reduce from one system to the other owing to the dosing by teaspoonfuls:

Quinine sulphate..... 4.	= 60 grains
Strychnine sulphate..... .030	= $\frac{1}{4}$ grain
Diluted sulphuric acid..... 4.	= 60 m.
Distilled water to make..... 120.	= 30 fl. 3

Dose: teaspoonful = fl. drachm.

Just as in adding up figures in a ledger we use lines in place of decimal points to insure a regular column, so in writing the metric figures lines are preferable to dots.

The equivalents are given at the right.

In reading the prescription we say 4 grammes of quinine sulphate, 30 milligrammes of strychnine sulphate, 4 fluid grammes or cubic centimeters of diluted sulphuric acid and 120 fluid grammes or cubic centimeters of distilled water.

The dose is 1 fluid drachm, which is 4 cubic centimeters. There are as many

\* Remington's Pharmacy and Pharmaceutical Era Key to U. S. P.

doses in the whole mixture as 4 cc. are contained in 120 cc., which are 30 doses. Then  $\frac{1}{30}$  of 4 grammes of quinine is  $\frac{1}{7.5}$  of its equivalent, 60 grains or 2 grains  $\frac{1}{30}$  of 30 milligrammes of strychnia is 1 milligramme, which is about  $\frac{1}{4}$  of a grain. The prescription is a safe one.

As an illustration of the uncertainty in the mind of a person not thoroughly familiar with the system, caused by the great difference in the figures standing for the same quantities, take the formula for opium pills:

Powdered opium.....6.5 = 100 gr.  
Soap.....2. = 30 gr.

Make 100 pills.

Here is an opportunity to show one of the reasons for discarding the use of the terms deci and centi, in figuring. To obtain  $\frac{1}{10}$  of 6.5 is easy enough, but to read 6.5 as six grammes and 5 deci-grammes or as 6 grammes and one-half and then obtain  $\frac{1}{10}$  of it, mentally, is not so simple. But we read it sixty-five hundred milligrammes and  $\frac{1}{10}$  of that number is sixty-five milligrammes .065, or one grain to each pill. But the figure .065, is very different from the figure 1 grain and at first it is difficult to believe both are the same.

After all it comes to this: A careful reading of the subject as given in any of our standard books, a continual endeavor to *think* in the system, daily practice with the pencil, and in conversation with fellow clerks about the store, are the ways leading to familiarity with the subject.

Written for the  
American Druggist and Pharmaceutical Record.

## WHAT I KNOW ABOUT VASELINE.

BY LUTHER F. STEVENS, Ph. G.,

Chairman of Committee on Revision of Pharmacopœia and Unofficial Formula, Brooklyn College of Pharmacy.

We have a wondrous love for the vaseline people, for which the salient reasons can readily be given in silhouette.

Their product had become known, its uses and disuses determined, the period of heaviest expense (the introduction era), gone by, and Americans were taking it up after our usual hearty fashion over a good thing, with vim and abundance, when the Chesebrough Company commenced those peculiar but nowadays familiar business tactics often undertaken in other lines by those in whom success begets undue head enlargement.

In an endeavor to coax the drug trade to heavier purchases, offers were made with alacrity to sell us in bulk lots of 50 lbs. and upward to any extent desired, with distinct promises that we were at liberty to bottle and attach local labels, name and address; this was well and the commodity was correspondingly pushed, without attempt by any one to supersede or intercept an arrangement equally advantageous to both manufacturer and final distributor, and matters so went on for two or three years. Then something occurred which did not originate from the retail end.

The quality of these bulk lots of 50 pounds seemed to vary, while "perfected packages," from ounce to pound, were carefully kept at the original standard, and all complaints from the trade and desires for rectification fell upon ears as dull as are those of the present Finance Committee of the Senate at Washington.

Shortly following upon this move came another, orders being issued that no dealer should longer use the word vaseline over

his own name; the owners would sell us their material in tons, and accept the requisite cash, but we were not allowed to again sell it. Threats of lawsuits flew about the air of these two cities as thick then as now, some ten or twelve years later.

A few months thereafter their selling agents offered to department stores upon "perfected packages" a line of discounts less than given to the wholesale druggists, and at which none else could purchase.

Owing largely to this continual succession of peculiar scheming, and to the claim made and held to under technicalities of law by the makers, that their product being a copyrighted nostrum was subject to their own varying dictation as to composition, use, and price, a material similar to this and obtainable in open market was made an official article in the materia medica of the Pharmacopœia printed late in the fall of 1888, as our scientists did not consider that any firm or consolidation could exactly own the whole of the methane series.

Considering all that has so far been related, could any business man be censured for pushing in every way possible the official substance?

Then commenced and has continued in various ways up to the present day a virulent assault upon this addition to the pharmacopœia list of medicinal articles, in which misleading statements were circulated far and wide.

One with variations which has been printed during the last year in nearly every trade paper and magazine throughout the country and a similar fitted to the necessity, sent as a circular to nearly every physician in the United States, will show the animus, for the active principle of all these prints when extracted reads more or less as follows:

"Petrolatum is not vaseline, and the formula given in the pharmacopœia will not make vaseline." "Petrolatum has come to mean a worthless and often noxious petroleum product varying in quality from axle grease up." "Vaseline is not only useful as a vehicle (as many physicians think), but it has extraordinary value as a remedy both externally and internally which petrolatum has not."

Connected with the circular sent to medical men are also many ridiculous and groundless insinuations directed at the makers of our medical standard and also at the retail druggist, which would seem an absurd method of making customers in the trade, except that it chimes in exactly with the whole line of action taken in connection with the retail trade.

As to the first direct charge, any one who reads the Pharmacopœia of 1880, or of 1890, will very plainly see that *no formula at all is given*, nor any pretense of one. Only melting points and other tests are given for an article found best for general needs in that line by competent and reliable gentlemen selected for the purpose by physicians and pharmacists in convention assembled, and representing the medical and pharmaceutical schools and societies of this land.

Regarding the second charge, please accept a little of history upon the matter. Upon the appearance of the new official our great and good friends began to send accredited agents to every retail dealer giving bids upon petrolatum somewhat below the ruling price, claiming that although their make was, better than could be possibly made by any one else, yet their great facilities enabled them to market it cheaper. Now consider a fine point in connection with their quoted statement number two.

The whole trade was thus stocked with petrolatum so called, but what stuff! Apparently it had been prepared to discredit the use of a healthy and active rival.

The final result being of course that we sought other brands which could be depended upon.

Number three claims a value to their particular refined article for internal use, and alleges damage connected with all others. This at least remains to be proven, as whatever such value is inherent is generally stated to be more particularly attached to the natural crude substance.

During all the time referred to some complained that the material called vaseline, and put out as the only original Jacob, had ceased to be identical with the original material. However, a still worse was soon let loose upon a long suffering community, having a pre-annexed title of "Blue Seal," and with this came a direct and deliberate bid to the cutters; the retailing price was paraded as 10 cents, but the discount given on quantities was so large that five cents would yield a percentage of profit, while the small dealer could not touch it. Finding that, notwithstanding an immense expense of advertising, this did not take very well, being but little heavier than a good cylinder oil, and that we were not brought to our knees, a still further "rub in" was devised. Our trade was offered upon the whole line of regular goods made by them, a discount sufficient to enable the small dealer a chance for competition with the bigger stores, and many bought heavily.

Just as soon, however, as this was done there appeared from Maine to Georgia in every horse car and elevated station and all the popular magazines, in fact in every place where eye could see, notices of a retail cut in price of over 50 per cent., and directly all of the cutting establishments of every kind were supplied at a new rate, and this but two or three years ago. It is quite easy to see why we so much love the vaseline people.

Written for the  
American Druggist and Pharmaceutical Record.

## COLORED FIRES.

BY "PYRO."

The Fourth of July is heralded some time in advance by numerous demands for pyrotechnics for producing the illumination and noise which seems to be the necessary concomitant of the "glorious" day.

A few hints regarding the composition of the different colored fires and illuminating combinations will be appreciated at this time. The ingredients mentioned in the formulas given below should be dried separately and the powders mixed with a wooden spatula on heavy paper.

### BRILLIANT STARS.

Potass. nitrate.....52 parts  
Sulphur.....13 parts  
Black antimony.....13 parts

Make this into a stiff paste with a solution:

Isinglass.....2 parts  
Vinegar.....8 parts  
Alcohol.....13 parts

Form into small pieces, and while still moist roll in meal gunpowder.

### GOLDEN RAIN.

1. Potass. nitrate.....16 parts  
Gunpowder.....16 parts  
Sulphur.....10 parts  
Charcoal.....4 parts  
Lampblack.....2 parts

Mix and fill paper tubes.

2. Potass. nitrate.....16 parts  
Sulphur.....8 parts  
Gunpowder.....8 parts  
Charcoal.....2 parts  
Lampblack.....2 parts

## RED FIRE.

Strontium nitrate.....	8 oz.
Potass. chlorate.....	2 oz.
Shellac (coarse).....	2 oz.
Strontium nitrate.....	10 oz.
Potass. chlorate.....	1 oz.
Charcoal.....	1 oz.
Sulphur (washed).....	1 oz.

## ROSE FIRE.

Potass. nitrate.....	8 oz.
Corn meal.....	2 oz.
Charcoal.....	¼ oz.

## CRIMSON FIRE.

Potass. chlorate.....	1 oz.
Strontium nitrate.....	6¼ oz.
Charcoal.....	¼ oz.
Shellac (coarse).....	2 oz.

## GREEN FIRE.

Barium nitrate.....	6 oz.
Potass. chlorate.....	1 oz.
Shellac (coarse).....	2 oz.
Barium nitrate.....	4 oz.
Milk sugar.....	4 oz.
Potass. chlorate.....	8 oz.
Barium nitrate.....	8 oz.
Potass. chlorate.....	4 oz.
Sulphur (washed).....	1 oz.
Antimony sulphide.....	¼ oz.
Charcoal.....	¼ oz.

## YELLOW FIRE.

Sodium nitrate.....	8 oz.
Shellac (coarse).....	1 oz.
Charcoal.....	1 oz.

## BLUE FIRE.

Potass. nitrate.....	8 oz.
Antimony sulphide.....	4 oz.
Zinc (metallic).....	2 oz.
Potass. chlorate.....	3 oz.
Potass. nitrate.....	4 oz.
Sulphur (washed).....	1 oz.
Copper oxide.....	1 oz.
Potass. chlorate.....	6 oz.
Alum (exsiccated).....	3 oz.
Shellac (coarse).....	2 oz.
Sulphur (washed).....	1 oz.

## WHITE FIRE.

Potass. nitrate.....	8 oz.
Charcoal.....	¼ oz.
Shellac (coarse).....	2 oz.
Potass. chlorate.....	6 oz.
Potass. nitrate.....	2 oz.
Stearic acid.....	¼ oz.
Milk sugar.....	2 oz.
Barium carbonate.....	¼ oz.
Potass. nitrate.....	6 oz.
Antimony sulphide.....	2 oz.
Shellac.....	2 oz.
Sulphur (washed).....	1 oz.

## LILAC FIRE.

Potass. chlorate.....	6 oz.
Shellac (coarse).....	3 oz.
Chalk.....	3 oz.
Black oxide of copper.....	1 oz.

## VIOLET FIRE.

Potass. nitrate.....	3 oz.
Potass. chlorate.....	3 oz.
Shellac.....	2 oz.
Chalk.....	2 oz.
Charcoal.....	¼ oz.

## Pharmaceutical Progress.

Cassia Siberiana, D. C., is used as a diuretic in West Africa, where it is called "Guamgua."

**Duration of Protection by Vaccination.**—Dr. Biedert gives 7 years as the average duration of protection, though in some cases it extends much longer.

Seeger's Hair Dye consists, according to Hofman (*Maanblad tigen de Kwaksalverij*), of a solution of 1 per cent. of pyrogallol and 1 per cent. of copper chloride, and should be characterized as dangerous.

Anona Senegalensis, Pers., which is called "diorgud" in Guinea, is mentioned by J. H. Ozanne (*Kew Bull.*) as being used as an infusion in diarrhoea and peritis

in the stomach. The natives also use the petals as a condiment in food.

*Sphæranthus hirsutus*, Willd., is believed by the natives of West Africa, where it is very plentiful, to act as an anodyne and narcotic when laid in the beds of the sick.—J. H. Ozanne, *Kew Bulletin*.

**Estimation of Albumen.**—According to comparative experiments of Alide Gruterink (*Nederland Tijdschrift voor Pharm.*, March, 1894), the Esbach method for estimation of albumen in urine is not sufficiently reliable to be depended on quantitatively.

**A Natural Toothache Gum.**—The natives of West Africa use the gum from an undetermined species of *combretum* as a remedy for toothache. A decoction of the root of the same tree, which is known to the natives as "Topp," is used as a remedy in gastralgia.

**Odol** is the name of a proprietary dentifrice that has formed the subject of considerable comment in Europe of late. According to the investigations of Van Huerch (*Journal de Pharmacie D'Anvers*) it contains 4 or 5 per cent. of oily neutral body, saccharine, peppermint oil, and fennel oil.

**Valuation of Iodoform.**—Vulpinus has found (*Pharm. Centralhalle*) commercial iodoform powder containing 18 per cent. of water. He therefore recommends the introduction of a test for moisture into the Pharmacopœia which would allow a loss of only one per cent. by weight in drying over sulphuric acid. "This, he thinks, would be of much more practical value as a pharmaceutical test than either the volumetric or gravimetric analysis.

**The Importation of Civet.**—Speaking of the importation of civet into the United States, a recent writer says it is imported into this country in the horn of the rhinoceros. It comes down to the coast of India in these curious receptacles, and is protected from harm by a membrane placed over the open end of the horn. Its crude perfume is thus brought undisturbed to this port. Each horn contains from eighteen to twenty-four ounces, and is worth almost as many dollars.

**Estimation of Carbon Dioxide in Presence of a Soluble Sulphide.**—Wolkowicz (*Zeits. f. Aug. Chem.*, 894, 165) proposes the following method of estimating carbon dioxide in the presence of a soluble sulphide. After fitting up the Friesenius apparatus in the usual manner an excess of a 20 per cent. solution of copper chloride is added to the substance to be examined which is placed in the generating flask. The sulphide contained in the substance under examination then forms a sulphide of copper which is completely insoluble in hydrochloric acid, and the carbon dioxide is then driven off and absorbed in soda and lime tubes and weighed in the customary manner.

**A New Systematic Botany of North America** is announced under the editorship of George F. Atkinson, Cornell University, Ithaca, N. Y.; Nathaniel L. Britton, Columbia College, New York City; John M. Coulter, Lake Forest University, Lake Forrest, Ill.; Frederick V. Coville, U. S. Department of Agriculture, Washington, D. C.; Edward L. Greene, University of California, Berkeley, Cal.; Byron D. Halsted, Rutgers College, New Brunswick, N. J.; Arthur Hollick, Columbia College, New York City, and Lucien M. Underwood, De Pauw University, Greencastle, Ind.

Each monographer will be responsible for his own matter, the only restrictions

placed on contributors being that they conform to a general style, to principles of nomenclature and to citations, and that descriptions be extended only to an average limit of a certain number of words, this number to be hereafter determined. The treatment of these matters will be indicated by sample sheets which will be distributed at an early date. It is expected that an approximately uniform consideration of species can be secured.

The editors believe it will be possible to produce a complete systematic botany of the country within fifteen years. They fully realize the impracticability of such a task being accomplished by a few students only, and earnestly desire the aid and support of all American botanists.—*Bulletin of the Torrey Botanical Club*.

**Test for Olive Oil.**—Herr Franz Musset suggests a curious test for olive oil (*Phar. Central*). In a ¼-ounce test-tube or phial put 2 drachms of the sample and introduce about 1¼ grain of dried phosphorus. Cork up the phial, and dissolve the phosphorus in the oil by means of the heat of a water bath. Allow to cool, stop up the phial with a plug of cotton-wool and set aside for twenty-four hours in a place where the oil will not freeze. If the oil is pure, at the end of twenty-four hours it will show whitish opaque streaks, which at the end of forty-eight hours settle round the sides and bottom of the vessel to form a quite clear ring of a yellowish-brown color. If the oil contains 10 per cent. of sesame oil the streaks formed at the end of twenty-four hours are still white; but it is not difficult with careful inspection to notice some yellowish ones among them, and at the end of forty-eight hours the stripes are all yellow. The greater percentage of sesame oil there is present the sooner does the characteristic yellow color appear, and very large percentages—e.g., 50—give a perfectly brown ring in a day or two. Moreover, if to the mixture a single drop of tar be added and allowed to fall to the bottom, then ¼ drachm of solution of ammonia is mixed with it, the pure oil is not changed in color, while that adulterated with sesame becomes brown in the course of twenty-four hours. Commenting upon the above we have not tried the test, but it seems one which should be useful.

**High Temperature Thermometer.**—Messrs. Baly and Chorley have devised a high temperature thermometer the novelty of which consists in the replacement of mercury by the singular liquid alloy of potassium and sodium. The boiling point of this alloy lies somewhere in the neighborhood of 700°, and its solidifying point is—8°, so that between these limits the liquid is particularly suitable for thermometric use. In order not inconveniently to lengthen the thermometer, the graduations are caused to commence at 300°, the bore for this purpose being widened just above the bulb. The space above the alloy is filled with pure nitrogen at such a pressure that when the glass begins to glow, and, therefore, soften, the interior pressure shall be equal to the atmospheric, and thus any tendency to alteration of volume avoided. The alloy exerts a slight action upon the glass at a red heat, causing a browning, but after the first heating during the preparation of the instrument the action ceases, the stained interior surface resisting further action. It is only necessary to heat the bulb and a small portion of the stem, for the coefficient of expansion of the alloy increases with the temperature in such a manner as to compensate for the error due



to the portion not heated. The graduations are thus equidistant, and various points in them are determined by immersion of the lower portion of the instrument in the vapor of high boiling substances whose temperatures of ebullition have been well ascertained.

**Distillation of Sandal-wood Oil in India.**—The distillation of sandal-wood oil in India is effected by the wet process in temporary sheds erected in or near the forest. The still used is the ordinary native one, consisting of three pots—viz., two large ones, doing duty respectively as boiler and condenser, and a third, a small copper one, which is inverted into the mouth of the boiler and is practically the cap of the still. This is fitted with a copper or bamboo tube about 4 feet long and having a bore of about 1 inch, which carries down the vapor into the condenser. The boiler, which may be of metal or ordinary earthenware, holds about 56 lbs. of sandal-wood chips with about 6 gallons of water. On one side of the boiler is a small opening which can be stopped and through which fresh water can be added as the water inside evaporates. The condenser is made of copper and has a capacity of about 3 gallons. Its mouth is stopped with leaves and coarse grass, and it is suspended on a forked piece of wood by its contracted neck inside a wide earthen ware trough filled with cold water, which is constantly renewed. Several such stills, usually twelve, are fixed in a row over a common furnace made of mud or unburnt bricks, and fed from the back under each boiler. The wood is shred into fine chips with a small, sharp adze. As the condenser fills gradually with water and oil, the latter is skimmed off (twice or thrice in the twenty-four hours) and emptied into a cistern or narrow tank kept in a corner of the shed. Only a small quantity of oil is obtained at each skimming. The fires burn night and day, and a single charge of wood takes about twenty one days to part with all its oil. The working season lasts ten months, during which, however, owing to constant holidays and slackness on the part of the men, the boilers are charged only about nine times. The wood of the root contains the largest quantity of oil, and is said by the natives to yield, according to its quality, from 11 to 4 per cent. of its weight of oil, although European distillers have never been able to get more than 2 per cent. The sapwood is too poor in oil to be of any use.

#### Alkaloidal Color Tests.

Udransky has proposed a series of tests depending upon the use of a solution of 5 drops of furfural in 10 cc. of concentrated sulphuric acid. A small piece of the alkaloid rubbed with 2 or 3 drops of this mixture in a porcelain basin with a glass rod produces the following colors:

Atropine.—Brown, but not characteristic.

Aconitine, brucine, and colchicine.—The glass rod is seen to turn brownish, but the reaction is not characteristic.

Strychnine gives a dirty brown color, and on warming dark green. On adding a few drops of water a dirty blue, passing to violet, is obtained.

Morphine and codeine give a reddish-brown color, becoming violet red on warming. The color of the mixture disappears quickly.

Veratrine gives a reaction passing from yellow through olive green to blue, changing later to sap green and blue.

Sabadilline gives the same colors as veratrine, only they are slightly purer.

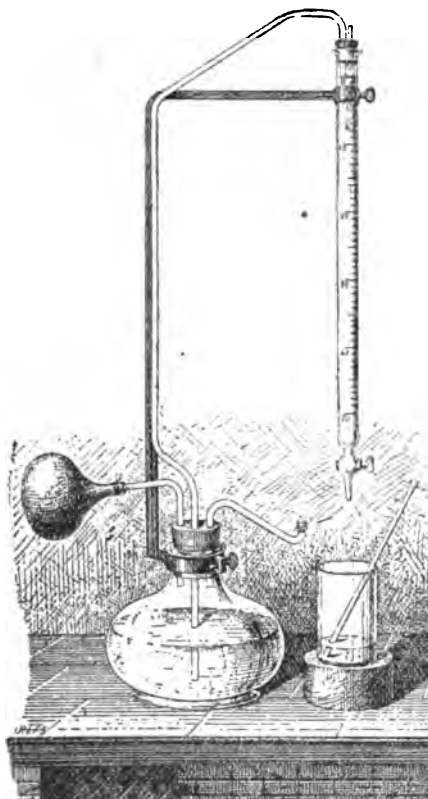
Papaverine gives a brownish color, passing to dirty violet.

Quinine forms a dark brownish-green mixture which becomes green, then brown on warming. On standing the color goes back to green.

Coniine and nicotine give brownish colors, which are not characteristic.

#### Automatic Burette.

M. Guichard describes an automatic burette, which is illustrated herewith, substantially as follows: (*Rep de Pharm.*, May 10, 1894, p. 204). The flask containing the titrating liquid is closed by a rubber stopper through which pass three glass tubes. One of these tubes opens into a rubber bulb which, when compressed, forces the liquid over into the graduated burette, filling it up to the zero mark, the excess



of liquid returning to the flask when the pressure on the bulb is relaxed. The burette is then ready for the operation.

When the titration is completed the third tube is brought under the burette and connected with it, the stopcock is opened and the liquid flows back into the flask for future use.

The burette is provided with graduations in cc. and also in the hydrometric scale.

#### American Colocynth.

Chas. B. Allaire, Ph.G., who is connected with the canaigre works at Deming, New Mexico, has grown there some fine specimens of colocynth from Trieste seed furnished by Dr. E. R. Squibb. Seven of them were submitted to Prof. L. E. Sayre of the University of Kansas from whose description and examination of them (*Am. Jour. Pharm.*) we take the following:

The green fruit had the following circumference measurements (the first figures representing vertical and the second horizontal measurements):

(1) 13 x 13½ in.; (2) 23½ x 24; (3) 22½ x

22½; (4) 18 x 19; (5) 20½ x 20½; (6) 18½ x 18½; (7) 20 x 21½.

The exterior had a marbled green surface. The interior exhibited a rind about ½ inch thick, inclosing a white spongy pulp, imbedded in which were numerous seeds. A section parallel to the axis showed vertical rows of seeds upon fleshy parietal placentae, which, on transverse section, were seen to project to the center of the fruit, then divide and turn back, making convoluting branches directed one toward the other. This structure made apparent three distinct wedges, each of which seemed to have two divisions bearing the dark brown, almost black, seeds. Here and there were found white, perhaps unripe, seeds. The fruit gave forth an odor not unlike that of cucumber, also suggesting that of watermelon.

The principal differences between the gross characters of this fruit and the imported article is that of size, and a correspondingly larger number of seeds which are larger in proportion and darker than those of foreign grown colocynth. In the imported fruit there are usually from 200 to 300 seeds, while the average number in the American is from 500 to 600. Physiological experiments upon the powder seemed to indicate that the American colocynth was only about two-thirds as powerful in cathartic action as that of the Trieste fruits.

The powder from the dried pulp was light in color, resembling the powder from the Indian fruit, and like the latter very bitter; the dust arising from it irritating to the eyes and nostrils, but differing considerably from the other in density, being much more compact and less fluffy.

Attempts to dry the whole fruit proved futile on account of the development of mold.

In the following summary of comparative analyses made by Prof. Sayre, the percentages are calculated from oven-dried powder:

Extracts and Constituents.	Imported.	American.
(I) Ether-chloroform extract.....	3.87	4.62
(a) Fat. (Petroleum-ether extract from I).....	1.11	.581
(b) Resin from I, soluble in alcohol and precipitated by water.....	.64	.48
(II) Alcoholic extract (of drugs from I).....	16.61	23.23
Principles acting as reducing sugar in II.....	2.85	10.31
(III) Aqueous extract.....	31.07	24.69
Gum (precipitated from III).....	9.36	12.61
(IV) Amyloid principles (in drugs of III).....	2.07	2.34
(V) Cellulose.....	13.5	14.76
(VI) Albuminous (protein) compounds.....	14.31	14.63
(VII) Ash.....	9.76	6.01
(VIII) Moisture (in air-dry powder)*.....	6.8	7.9
Diluted alcoholic (official) extract.....	32.68	38.87

Mr. Allaire stated that some watermelons were growing some distance away from the colocynth, and Prof. Sayre says that from the crude analysis made he is of the opinion that the watermelons must have had some slight influence upon the colocynth.

#### A. New Element.

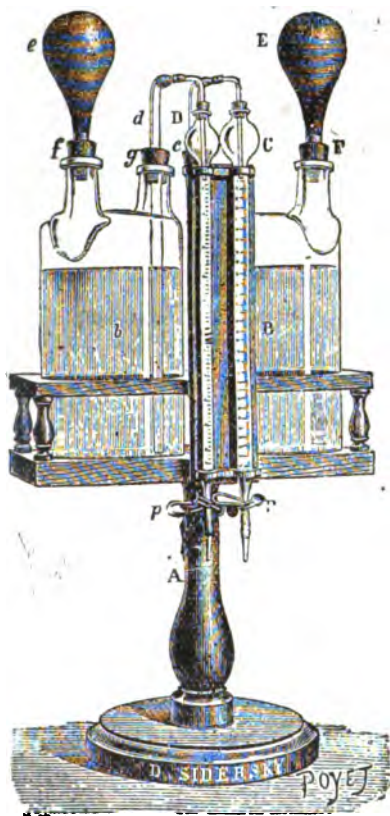
The *Chemist and Druggist* reports the claim of K. J. Bayer to the discovery of a new element in French bauxite. Mr. Bayer says that the acid of the metal is a yellowish-brown infusible body, which dissolves in water to form an intense gold yellow solution, and on neutralizing with ammonia the color is changed to olive green. The neutral solution gives the following precipitates: With barium

\*What is meant here by air-dry powder, with reference to American colocynth, is a powder dried at as low temperature as possible—not dried to constant weight. It may be said that the fresh pulp, deprived of seeds, contained about 92 per cent. of moisture.

chloride, greenish yellow; mercurous salts, bright straw color; silver nitrate, greenish; magnesia mixture, greenish crystalline precipitate, becoming yellow in acids; molybdc solutions, white on warming; sulphureted hydrogen in alkaline solutions red color, in acid a brown oxysulphur salt of the metal, with precipitate of sulphur in violet solution. Potassium ferrocyanide, a very delicate reagent for vanadium and molybdenum, gives neither precipitate nor color. These interesting reactions seem to point to a compound of two heavy metals rather than a new element.

### A Double Burette for Volumetric Analyses.

The accompanying figure illustrates an apparatus designed to facilitate work in volumetric analysis where two titrating liquids have to be used, as, for instance, an acid and an alkali, iodine and hyposulphite of soda, permanganate and oxalic acid, uranium and phosphoric acid. The



apparatus presents some very practical advantages. The principal features are described by the inventor, D. Sidereky, in the *Repertoire de Pharmacie*.

The construction of the apparatus is shown so plainly in the illustration as to require no further explanation.

On compressing the bulbs *Ee* the liquid rises through *Dd* into *Cc* until the burettes are filled, after which any surplus is drawn back by the siphon formed of *Dd* until the zero point is reached in the burette.

### Iodine Ointment.\*

By S. A. McDONNELL, PH.G.

I had occasion to use some iodine ointment for a prescription a short while ago,

\*Read at the semi-annual meeting of the California Pharmaceutical Society, held in San Francisco, May 7, 1894.

and upon removing it from the stock jar I noticed it was dotted throughout with the black specks of iodine. This indicated that it had been imperfectly made (and, by the way, it requires some patience to properly prepare it). Not desiring to throw it out—as it should not be dispensed in that condition—I took what I wanted from the jar and, placing it in a convenient water bath, applied heat until it melted, and was gratified to observe that the iodine lost itself in the fat, much

"Like a snowflake on a river,  
A moment black, then gone forever."

Hence, on further experiment, I have concluded that this is the way to make iodine ointment. Just try a little—say

Iodine.....gr. iv  
Adipis.....gr. xcvi  
Mix.

Place the lard on a water bath and apply heat until melted, then drop in the iodine and stir with stick or glass rod, when the iodine will soon be dissolved. The object of the iodide of potassium and water in the official ointment is to dissolve the iodine—and in the hands of many it is only very imperfectly done, whereas by the above method it is a case of why did I not think of this before? The result is far superior and with much less labor. Of course it is understood that the heat is not high—the lard melts at near 85° C. (95° F.), and this low heat does not vaporize the iodine to any more appreciable extent than ordinarily, as it is only slowly volatilized at ordinary temperatures, and it does require 114° C. (237.2° F.) to melt it and give rise to the purple vapors, which would indicate a loss of some portion of the iodine, if not confined in a closed space. The ointment this way prepared is superior, inasmuch as we get rid of the hard crystals of iodide of potassium which remain when the water has evaporated, and scratch the tender skin by the rubbing to which it is subjected.

### Therapeutic Value of Phenocol.

Archangelo summarizes his opinion as to the value of phenocol as follows: (1) Phenocol is a remedy worthy of an important position among the newer drugs. (2) It is a powerful antimalarial agent, a worthy supplement to quinine. (3) It is valuable in rheumatism of acute character, but useless in chronic rheumatism. (4) It is of great value in infantile therapeutics, especially in cases of malaria, typhoid, or rheumatism. (5) It is a good antiseptic; of especial service as an intestinal antiseptic. (6) It has but little value as an antineuralgic.

### Pharmacy in Japan.

The *Pharmaceutische Zeitung* contains some interesting particulars on pharmacy in Japan, communicated by Professor Ogata of Tokio. Medical students, says that authority, must have followed an eight-years' course at a Japanese University before they are permitted to present themselves for the medical qualifying examination. A few of the most promising

graduates are annually sent to Germany by the Japanese Government for further training, and these men upon their return are usually appointed University professors. As a rule, the offices of physician and pharmacist are combined in the same person. Nearly all medical men do their own dispensing, and are paid, not for their professional visits, but for the medicine supplied by them. The average charge for medicaments is about 2½d. per day. The Japanese medico-pharmacist usually keeps two or three assistants, who prepare the medicines for him. Efforts have lately been made to separate the medical and the pharmaceutical professions, but so far without much result, most of the medical men opposing the change. The Japanese practice of sending annually a batch of young physicians to Germany no doubt accounts for the esteem with which German medical and pharmaceutical methods are regarded in Japan, and for the modeling of the Japanese Pharmacopoeia upon a Teutonic pattern.

### A New Suppository Machine.

Herewith is illustrated a machine for making suppositories, which is simple in construction, compact, and easily and



A NEW SUPPOSITORY MACHINE.

quickly operated, and which will make smooth and solid suppositories.

Each machine is furnished with a set of molds for making suppositories of three sizes—15-grain, 30-grain, and vaginal—and with mold for forming bougies. These molds are of brass and are screwed into the end of the cylinder. They can be easily and rapidly inserted or removed.

In making suppositories the cacao butter containing the medicant is placed in the cylinder, the mold required being first attached; the cylinder is put in position with the end of the mold resting against the movable plate at the end of the machine. The mass is then compressed in the forms by turning the wheel and screwing the plunger into the cylinder. After forming the suppositories the end plate is removed, and a further turn of the wheel forces them out upon the tray. The operation is then repeated until all the mass has been used.

By a special device the screw on the plunger rod may be released so that the plunger may be pushed into the cylinder or withdrawn from it without the slow process of screwing.

The price of the machine with the four molds is \$18, from which a trade discount of 50 per cent. is allowed. They are sold by Whitall, Tatum & Co., of New York, Philadelphia and Boston.

## Guide to New Remedies.

- ABRISTOL:** New name for Asaprol; calcium betanaphtholalphanonosulphonate.—Antiseptic.
- ACETOPHENONE:** Hypnon; hypnotic.
- AGATHIN:** Salicylaldehyde, methylphenylhydrazine.—Anti-neuralgic and anti-rheumatic.
- AGOPYRINE:** Mixture of Salipyrine, Ammonium chloride and Cinchonine sulphate, in tablet form.—Influenza remedy.
- ALPHOL:** Salicylicacidalphanaphthyl ester.—Antirheumatic, antisyphilitic.
- ALUMNOL:** Aluminum naphtholsulphonate.—Astringent antiseptic.
- AMIDOL:** Diamidophenol hydrochlorate.—Photographic developer.
- ANASPALIN:** Mixture of Lanolin and Vaseline.—Ointment base.
- ANTACIDIN:** Calcium Saccharate.
- ANTIBACTERIN:** Mixture of Crude Aluminum Sulphate and Soot.
- ANTIBENZINPYRINE:** Composition unknown.—Addition to Benzin for preventing Electric Irritability.
- ANTIDIPHtherin:** Metabolic product of Diphtheria Bacilli; prepared by Klebs.—Specific against Diphtheria.
- ANTIDYSENTERICUM:** Mixture of Pelletierine, Extract of Pomegranate, Myrobalans, Extract Rose, and Acacia, in pill form.—Dysentery Remedy.
- ANTIFUNGIN:** Boric Acid and Magnesia.—Preservative.
- ANTIPHthisin:** Metabolic product of Tubercle Bacilli.—Remedy against Phthisis.
- ANTIRHEUMATIN:** Mixture of Sodium Salicylate and Methylene Blue.—Rheumatic Remedy.
- ANTISEPSIN:** Serum of Animals treated with Iodine Trichloride.—(Monobromacetanilide bears the same name.)
- ANTISPASMIN:** Narceine-sodium and Sodium Salicylate.—Antispasmodic and Sedative.
- ANTITOXIN:** Metabolic product of Typhoid-spirilla.—(This name is also generally applied to the metabolic products of all bacilli.)
- APYONIN:**—Substituted for yellow Pyoktanin (in France.)
- AQUOZON:**—2.5 per cent. aqueous ozone solution with addition of hypophosphites.—Roborant, tonic.
- ARGENTAMIN:** Ethyl diamine and Silver phosphate.—Local antiseptic and astringent.
- BERGAMIOL:** Linalyl Anetate.—Used in Perfumery.
- CAMPBAR:** Solution of Camphor in 50 per cent. Alcohol, with excess of Camphor.—Dermal rubefacient.
- CANCROIN:** Alexine of Cancer, according to Adamkiewicz. Also made artificially from Neurine.—Remedy against Carcinoma.
- CARDINE:** Extract of Heart-muscle.—Cardiac tonic.
- CEREBRINE:** Extract of Cerebral-substance.—Nervine.
- CHLORALOSE:** Condensation product of Glucose and Anhydrous Chloral.—Hypnotic.
- CHLOROL:** Solution of Mercuric Chloride, Sodium Chloride Hydrochloric Acid, and Copper Sulphate, in Water.—Antiseptic.
- CHLORYL:** Mixture of Methyl Chloride and Ethyl Chloride.—Local Anæsthetic.
- CINNAMOL:** Rectified Cinnamon Oil.
- CRELIUM:** Cresol Soap.
- CRYSTALLINE:** Solution of Pyroxylin in Methylene Alcohol.—Dermal application.
- DESINFECTIN:** Residue of distillation of Crude Naphtha treated with Sulphuric Acid, mixed with Soda solution, and diluted with water.—Disinfectant.
- DEXTRO-COCAINE:** Iso-cocaine.
- DEXTRO-SACCHARIN:** Mixture of Glucose with Saccharin.
- DIABETIN:** Levulose.—Diabetic Sugar.
- DIAPHthal:** Orthoquinoline Meta Sulphonic Acid.—Internal Antiseptic.
- DIODOFORM:** Tetraiodoethylene.—Antiseptic, like Iodoform.
- EMOL:** A substance allied to Fuller's Earth. Possibly Talcum.—Vulnerary.
- EUROPHEN:** Phenylurethane.—Analgesic, Antipyretic, Antineuralgic.
- EUPHORIN:** Di-Isobutyl Orthocresol Iodide.—Succedaneum for Iodoform.
- FERRATIN:** Iron Preparation from Hog's Liver.—Hæmatinic.
- FORMALIN:** Forty per cent. solution of Formaldehyd.—Antiseptic.
- FORMALITH:** Silica saturated with Formalin.—Vulnerary.
- GADUOL:** Alcoholic Extract of Cod Liver Oil.—Succedaneum for the pure oil.
- GALLAL:** Aluminum Gallate.—Astringent.
- GALLAL SOLUBILE:** Aluminum and Ammonium Gallate.—Astringent.
- GALLOBROMOL:** Dibromogallic Acid.—Antiseptic Sedative.
- GLYCERO PHOSPHATES:** From phosphorus and Glycerin.—Specific Nervous Nutrient in Nervous Depression.
- HÆMOGALLOL:** Reduction product of Hæmoglobin obtained by the action of Pyrogallol.—Agreeable and assimilable Blood Producer.
- HÆMOL:** Reduction product of Hæmoglobin, obtained by Zinc Dust.—Hæmatinic, like Hæmogallol.
- HÆMOSTATICUM:** Extract of the Thymus Gland of the Calf, admixed with 1 per cent. of Calcium Chloride, and Alkalized with Soda Solution.
- HEADINE:** Mixture of Acetanilide and Sodium Bi-carbonate.—Cure for Cephalalgia.
- IATROL:** Oxyiodoethylanilide (?).—Antiseptic, like Iodoform.
- IODOCAFFEINE:** Unstable Compound of Caffeine with Iodine.
- IODOL CAFFEINE:** Crystalline Compound of Caffeine and Iodol.—More stable than Iodol.
- IODOCASEIN:** Compound of Iodine and Casein used for Antiseptic Dressings.
- IODOLINE:** Quinoline Chloromethylate, Chlorodized.—Antiseptic.
- IRONE:** Odorous principle of Orris Root.
- IZAL:** By-product obtained in Coke Formation; "Thornecliffe Disinfectant."
- KARDIN:** Cardine.
- KATHTRIN:** Carbon Tetrachloride.
- KREOSOTAL:** Creosote Carbonate.—Antitubercular.
- KRESIN:** Twenty-five per cent. solution of Crealyic Acid in Water containing Sodium Cresoxylacetate.—Superseded by Tricresol.
- KRESOL:** Fifty per cent. Soluble in Water; Cresol Soap.—Antiseptic.
- KRESOL SAPONATE:** Cresol Soap.
- LANAIN:** Purified Adeps Lanæ (Wool-fat).—Ointment-base.
- LITHIUM DIURETIN:** Theobromine-Lithium and Lithium Salicylate.
- LORETIN:** Metaiodoorthoxyquinoline Sulphonate.—Succedaneum for Iodoform.
- LYCETOL:** Derivative of Piperazin.—Diuretic, Antithic.
- MALAKIN:** Salicylaldehyd-Paraphenetidine.—Antipyretic and Anodyne.
- METHYLENE:** Mixture of Chloroform (4 vol.) and Methylene Alcohol (1 vol.).—Anæsthetic.
- MIGRAININE:** Citrated Antipyrine-Caffeine. Probably merely a mixture of Antipyrine, Caffeine, and Citric Acid.—Remedy against Migraine.
- NASROL:** Sodium Caffeine Sulphonate.—(This name has recently been replaced by "SYMPHOROL.")
- NEURODIN:** Acetyl-paraoxyphenylurethane.—Efficacious Antineuralgic.
- OLEO-GUAIACOL:** Oleic Acid-Guaiacol-ester.—Antitubercular.
- OLEO-CREOSOTE:** Oleic Acid Creosote-ester.—Antitubercular.
- PHEDURETIN:** Phenol-derivate; composition unknown.—Diuretic and Anodyne.
- PIXOL:** Mixture of Potassa-solution, Wood-tar, and Soap.—Antiseptic.
- REDUCIN:** Composition unknown.—Photographic Developer.
- RESOL:** Wood-tar and Wood-spirit saponified with Potassa.
- RESORBIN:** Ointment base consisting of Almond Oil, Wax, Glue, Soap and Water.
- RESORCYLALGIN:** Antipyrine Betaresorcy-late.—Antipyretic and Anodyne.
- RHODALLINE:** Thioisamine.—Dermic, and Fixing Agent in Photography.
- SALOQOL:** Phenocoll Salicylate.—Antipyretic.
- SALUMIN:** Aluminum Salicylate.—Astringent.
- SALUMIN SOLUBILE:** Aluminum and Ammonium Salicylate.—Astringent.
- SALOLPHEN:** Salicylphenetidine.—Anodyne, antirheumatic, and antineuralgic.
- SANATOL:** Crude Cresol-sulphuric Acid.—Disinfectant.
- SANGUINAL:** Blood Preparation of indefinite composition.—Hæmatinic.
- SAPROL:** Mixture of Crude Cresols with Hydrocarbons.—Antiseptic.
- SEDATINE:** Paravalerylamidophenetol.—(Formerly a synonym of Antipyrine).—Sedative.
- SEQUARDIN:** Sterilized Testicular Fluid.—Nervine.
- SOMATOSE:** Albumose Preparation.—Dietetic.
- STERESOL:** Solution of Gum-lac, Benzoin, Tolu Balsam, Carbolic Acid, Cinnamon Oil, and Saccharin, in Alcohol.—Antiseptic Varnish.
- STERILISATOR:** Aromatic Vinegar, with free Hydrochloric Acid, Tartaric Acid, Citric Acid, and Saccharin.
- SUCROL:** Dulcin; Paraphenetol-carbamide.—Sweetener.
- SULPHURATED OINTMENT:** Mixture of Unsalted Butter (25) and Concentrated Sulphuric Acid (5).—Revulsive.
- SYMPHOROL:** Generic name for the Salts of Caffeine-sulphonic Acid. "L" = Lithium, "N" = Sodium, "S" = Strontium Salt.—Diuretics.
- TANNAL:** Aluminum Tannate.—Astringent.
- TANNAL SOLUBLE:** Aluminum Tannotartrate.—Astringent.
- THERMODIN:** Acetyl-ethoxy-phenylurethane.—Prompt Antipyretic.
- THEOFORM:** Bismuth, Dithiosalicylate, Coagulant, Hæmostatic, Antiseptic, Mildly Anæsthetic.
- THIOSAPOL:** Soap chemically combined with Sulphur.
- THIOFORM:** Bismuth dithiosalicylate.—Coagulant, hæmostatic, antiseptic, mildly anæsthetic.
- THURET:** Oxidation product of Phenyl-dithiobiuret.—Antiseptic.
- TOLYLANTIPYRINE:** Tolpyrpyr, Paratolylidimethylpyrazolone.
- TOLYLHYPNAL:** Chloral Hydrate-Tolpyrpyr.—Anodyne and Hypnotic.
- TRICRESOL:** Purified natural mixture of the three Cresols of Coal-tar.
- ULYPTOL:** Eulyptol.
- URETHYLANE:** Methyl Urethane.
- URICEDIN-STROSCHEIN:** Compound containing in 100 parts: 27.5 Sodium Sulphate, 1.6 Sodium Chloride, 97 Sodium Citrate, and 1.9 Lithium Citrate.
- VALZIN:** Dulcin; Sucrol.
- VASOGEN:** Oxygenated Vaseline. Sulpho-leated Mineral Oil Emulsifiable with Water.—Absorbent Vehicle.



## Experiences of Photographic Trade.\*

BY A SUBURBAN PHARMACIST.

My experience in combining the business of a photographic dealer with that of a pharmacist has been so encouraging that I venture to submit some notes in the hope that they may be useful to others similarly situated. As an apprentice and assistant I dabbled in the "dark art," always having sufficient interest in it to keep *au courant* with its advances. When I went into business on my own account, my neighborhood turned out to be rather hot in a "cutting" sense, and the frequency with which it was brought home to me that those "wretched proprietaries" could be obtained equally well at an oil shop or draper's made me think it was time to counteract in some way such an unprofitable branch.

About this time my attention was drawn to retailing photographic materials by some correspondence on the subject in *The Chemist and Druggist*, the result being that I resolved to give it a cautious trial. When next my windows were dressed I put a little pile of dummy Ilford plates in a good position, and inscribed in my best printing the legend "Photographic Materials." In the pharmacy itself was placed one of Lancaster's quarter plate "instantographs," and a small stock of plates (I believe only three dozen quarter-plates) was laid in. It surprised me to find from the remarks of customers what a lot of amateurs there were about, and presently people I had never seen before would look in and say, "I see you stock plates," etc., and want to know the cost of making up some developer or other recipe.

I used at this time to get plates and papers through the patent medicine houses; but as business grew I found a distinct saving in dealing direct with makers, some of whom offer great advantages to even small orders from genuine dealers. Next season I took a series of local views and exhibited them in the window, replacing showcards in the pharmacy by photographs and enlargements to illustrate different processes. This attracted a lot of attention not only from photographers but from the laity. A more elaborate decoy camera now took its place beside the humble "instantograph"—a half-plate camera, resplendent with brasswork and French polish, its lens fitted with a Thornton-Pickard instantaneous shutter and fastened on a beautifully made stand with aluminium fittings.

I fitted up a "Dark-room for Amateurs" quite inexpensively. A light tight wooden shutter was fitted over the window, with a small piece of ruby glass let in for working in the daytime; for night work an argand gas burner with suitable ruby chimney was provided. A table, chair, bucket, glass water barrel, a few measures and dishes, developing and fixing solutions, completed the contents of the room. Naturally, the luxury of water laid on, with a suitable sink for waste water, will suggest themselves to anyone who wants to do the thing more thoroughly. A series of printed labels for the more common photographic chemicals always makes more impression than written ones.

Your competition has already shown that the most popular sets of apparatus for an amateur to start on and for this reason for a dealer to stock, are those made by Lancaster of Birmingham. They very reasonably require, as a guarantee that their customers are really dealers, that the opening order should be for at least three

cameras, but this need not entail much expense.

The English lens makers allow a good discount to dealers; it is well to be provided with their lists and terms against an inquiry.

A rather noticeable outcome of the keen competition between dry-plate makers is seen in the publication of gratis monthly magazines by some of the big firms. The makers of Ilford plates publish monthly *Photographic Scraps*, and although a good part is given over to testimonials of their own goods, there is still a sufficiency of information to make it worth reading. The proprietors of Cadett plates publish a magazine called *Dry Plates*, in which a series of very concise instructive articles are appearing with other well selected material. Elliott & Sons of "Barnet plate" fame, bring out *The Photographer's Record*, which in addition to the reading matter frequently contains a small photograph in carbon, one of their specialties. A regular supply of these publications would be sent on request, but of course it is reasonable to expect the dealer to carry a stock of the respective plates.

It is a good plan to make a feature of a developer, toning bath or anti-halation backing compound. Perhaps the best developer to start a beginner with is the hydroquinone developer, for which there is a formula given on the lid of boxes of Ilford plates. Pyro developer yields fine results, but needs a lot of experience to make the best use of it. In *The Chemist and Druggist* April 21, there was a recipe for "Combined Toning and Fixing Bath,"\* which answers well. It has been made up and sold in my business for two years now, although candidly I would hesitate to guarantee the permanency of prints treated to such a heterogeneous mixture. The separate toning and fixing baths are undoubtedly better and simpler and more likely to give stable results.

Newly fledged amateurs thirst for novelty, and the chemist should be prepared to bring new developers and papers to their notice. Personally I take in quite a budget of photographic papers and endeavor to try practically any new developer or process, so as to keep up with my more advanced customers. It is a good plan to get identified with a local association, as this is an easy means of introducing a lot of custom; a list of members can usually be had from the secretary, to whom could be posted price lists of photographic goods kept in stock. It is even worth while to start a society if one does not already exist in the neighborhood, only it is policy not to hold a too responsible post therein. When the winter draws near the supplying of lantern requisites is now a feature in photographic businesses. Many amateurs make lantern slides of their best work and thus are able to show their photographs to a greater number. There is also business to be done by letting slides on hire.

Druggists ought really to grasp the fact that, as they are the only legal vendors of some extensively used photographic chemicals, amateurs naturally expect to obtain other requisites at a druggist's in preference to an ironmonger's or stationer's. One important thing should be borne in mind—never to knowingly sell stale plates or papers, as this does an immense amount of harm and is an evil really existing. Stale plates or papers should rather be thrown away or offered at a cheaper rate, as they are often useful for experimental purposes.

An interesting effect of combining pho-

\* See also Queries and Answers column in this issue.

tography with a chemist's business is that it keeps the returns (which in many businesses drop in the summer months) up to the winter level—at least, such has been the effect in my own case, and I can never regret the day I embarked in the business.

## West Indian Lime.

(*Citrus Medica*, L., var. *acida*, Brandis.)

One of the most distinct species of *Citrus* is *C. Medica*, which includes the citron, lemon, and the limes. Of the limes there are sweet and sour limes, characterized, according to Roxburgh, by small pinkish flowers, usually four petals, and a perfectly spherical fruit, having a thin skin of a lively yellow color and pale acid juice. Sir Joseph Hooker states that the word lime is promiscuously applied to fruits very different in character, especially in British India, where the sweet limes of various forms are universally spoken of under that name.

The sour lime, although probably introduced from the East Indies, has made its second home in the West Indies, where, indeed, is its present principal area of systematic cultivation. The history of the sour lime is given by Sir Joseph Hooker in the *Botanical Magazine*, tab. 6745. It was first described by Rumph (Hortus Amboinensis ii, p. 107, tab. 29) in 1750, under the name of *Limonellus*, alias *Limotenuis*, or thin-skinned lemon. *C. Limonellus* is also described by Miquel, who says it is cultivated everywhere in the Dutch East Indies. The same plant is well figured by Wight as *C. Limetta*, Risso (*Icones*, t. 958), who says it is wild in the Nilgiris. In the West Indies, McFadyen very clearly describes it as *Citrus Lima*, "a thorny shrub with ovate leaves, pentamerous white flowers, small nearly globose yellow fruit, with thin skin, and an abundance of pure acid juice; it is naturalized in Jamaica, forming strong fences." Brandis (*Forest Flora*, Ind., p. 52) rightly places the sour lime of India as a variety of *Citrus Medica*, L.; other authors refer the sour or West Indian lime to *C. Limetta*, Risso, its nearest European representative, but this latter differs in its sweet juice. The botanical position of the West Indian lime as an acid variety of *Citrus Medica*, L., is now established. This small acid lime seems confined to tropical and sub-tropical zones. It does not appear to flourish in Southern Europe, and as already stated, its present headquarters under cultivation are in the West Indies, where in the islands of Montserrat, Dominica, and Jamaica it is commercially utilized for the production of lime juice and essential oil.

The lime, as already mentioned, yields juice of a singularly pure, acid flavor. The fresh limes are sometimes exported as gathered, or they are pickled in sea water or brine and shipped to the United States. The demand for the fruit in a fresh or pickled state is said to be very limited. Sir Joseph Hooker states: "The lime is a favorite fruit in the West Indies and the Southern United States, the acid being far more grateful than that of the lemon; and it is, hence, universally used for flavoring soups, etc., and in the preparation of many alcoholic and acidulated drinks. In my younger days it was imported in vast quantities into the city of Glasgow, providing an indispensable material for the brewing of the famous Glasgow punch. That it is now so seldom seen, comparatively, is due to the declension of that social and family intercourse that once was so intimate between the great city and the Spanish Main. It is still (with the lemon) the principal source of citric acid."

\* *The Chemist and Druggist*.

### Preparation of Diphtheria Antitoxin.

Heretofore active antitoxins have been prepared in a solid form by precipitating all or a portion of the albumen from either blood serum or from milk by means of the albumen precipitates usually utilized in physiological chemistry, such as alcohol or ammonium or magnesium sulphate. Aronson has observed (*Berl. Klin. woch.* No. 19) that by filtering liquids rich in bacteria through a not too thin layer of freshly precipitated aluminum hydroxide, complete sterilization can be obtained. Unlike a bouillon which was freed from bacteria by filtration through a Chamberland filter, a liquid filtered through aluminum hydroxide proved to be non-toxic. Further experiments proved that the freshly precipitated hydroxide did not destroy the antitoxin but merely kept it from passing through. The intensity of the retained antitoxin varies, however, with the thickness of the layer through which it is filtered. This Aronson overcomes by adding aluminum sulphate to the solution containing the antitoxin and precipitating by addition of ammonia. This precipitate contains nearly all of the antitoxin present in the fluid and is thus proportionately richer in antitoxins.

Practically the process is carried out thus: Dilute 100 cc. of blood serum containing the antitoxin with an equal volume of water, add 70 cc. of a ten per cent. solution of aluminum sulphate and then add five per cent. ammonia solution until only a weakly acid reaction is shown.

Other inorganic precipitates of a colloidal nature will also answer for this purpose, such, for instance, as ferrocyanide of zinc produced by the precipitation of zinc sulphate solution by ferrocyanide of potassium, or hydroxide of iron, produced by precipitation of ferric salts by alkalis.

The antitoxin-bearing inorganic precipitate, which, in the use of a colloidal aluminum salt can be produced containing 95 per cent. of active principle, should then be washed with water and separated by repeated treatment with a weak alkaline solution (sodium carbonate in ammonia). The separation of the larger portion of the active substance contained in the fluid from the inorganic matter present must be so conducted that only small quantities of the liquid should be placed in a filter at one time, and the filter be constantly agitated, as otherwise the alumina will collect upon the filter paper and thus retain the active constituent.

The antitoxin can be obtained in the solid form from this albuminous filtrate, either by precipitation with alcohol or with ammonium sulphate or by evaporation of the solution at a temperature of 45° C. in vacuo.

The substance thus obtained should be white, soluble in water, more readily soluble in dilute alkaline solutions, and should show the general reactions of albuminoids. It contains about from 3 to 5 per cent. of ash.

From a blood serum of which 0.0005 cc. sufficed to fully counteract the quantity of diphtheria poison sufficient to kill a guinea pig weighing from 300 to 400 grammes in 38 to 48 hours, Aronson obtained an antitoxin in solid form, of which 0.000015 grammes exercised a corresponding effect.

#### FOR ITCHING PILES.

Chloral hydrate.....gr. xx  
Petrolatum.....3j  
Menthol.....3ss

### Oak Wood and Bark.\*

BY WM. B. THOMPSON.

Philadelphia, Pa.

It is asserted that oak timber of the present, particularly in England, is not the equal in durability to that of a former period. If the wood has deteriorated is it not likely that the bark, too, has become inferior? Tanning barks, especially of the oaks, play an important role in the arts. An exhaustive examination of the various derivatives of the universal astringent principle of vegetable substance—tannin—in its natural combinations, shows great variation in the respective yield, which variation is influenced by climate, soil, culture, season periods and other causes. As these agencies change or become modified by further circumstances the time will, no doubt, arrive when some natural productions of the vegetable kingdom may be so diminished in amount and quality of product as to cause serious inconvenience. One chief source of error in the cultivation of trees and plants exists in the fact that we do not adhere with sufficient exactness to the processes which nature in her laws has wisely established for the fulfillment of her designs. The agriculturist, in the cultivation of his arborous and other trees, aims to produce, with growth, points of beauty. Nature does this too, but, unlike the man, she never sacrifices the utilities to the pleasing attributes. The germination of seed and the means by which healthful, progressive growth is secured is a subject which may and can be better comprehended. The acorn falls upon the surface of the ground, and the natural processes take care of it there. Man buries the seed of the oak, and the probabilities are that he blunders in doing so. An examination of a sprouting nut will show that this growth tends downward as if in an effort to reach the soil, while the acorn lies on its side, though even then the little tubercle, which is ultimately to become the tree, keeps its apex upward. This makes it evident that this part of the process at least should be performed in the air and light, that is when it is done as Nature intended. It is usually considered that during the fermentative part of the process of germination—the earliest stage—light should be excluded. This cannot apply, however, to the seed of the oak, because that part of the process is performed before the shell is ruptured.

Now, the conditions which surround the starting point of vegetable growth are good subjects to study, and are also matters which cannot be treated with indifference, or in ignorance, if we propose to attain good results. Just what bearing the air-grown and the earth-grown processes have, relatively, upon the fiber and the heart of oak, it would be of much interest and value to know. A buried acorn somehow strives to get to the surface, and when there this is noticed—that the cotyledons acquire a greenish tinge of color which they do not have when buried. Does this not furnish some significant information? Is it not known that in all etiolate plants, when compared with the same species which have been air-grown as it were, or grown in the sun beams, are wanting in carbon and astringency—the very essentials in which the now perishable wood of oak is so markedly deficient. Is not our blanched celery of the table an illustration of this also? We have soft, tender threads and much succulency. So

in the artificially grown oak we have a loose texture and a weak fiber. Think for a moment of the wood of oak enduring in use five hundred years! Start growth wisely and well, the timber and parts will be good; the tree may be gnarled, stunted, deformed in comparison with lines of grace, symmetry and beauty in limb and branch, but the durability will nevertheless be there and the traditions of the stanch old oak still be a boast of our time.

#### Oil of Bay.

Fritzsch Brothers, New York and Garfield, N. J., U. S. branch of Schimmel & Co. of Leipsic and Prague, have issued a circular of information on oil of bay which is of sufficient importance to pharmacists and others interested in the chemistry of the essential oils to warrant us in reproducing the article in our columns.

Fritzsch Brothers say:

Some statements recently published by a New York firm of manufacturers and dealers in essential oils, relating to the physical characters of oil of bay, more especially to its specific gravity, have led to a number of inquiries on the part of our friends and patrons respecting their correctness or validity. It is therefore in response to such inquiries, as also to consider some other points of controversy relating to this oil, that we have been induced to issue this circular.

In order that our views on the subject may be correctly apprehended, and the points to which we take exception more easily noted, we deem it best to reproduce *verbatim* the statements of the firm referred to, which are as follows:

Several years ago (1888) this oil was the subject of a great deal of newspaper controversy bearing on its specific gravity, and it was generally agreed among those who were competent to judge, that the specific gravity of a complete bulked distillation of pure oil should be about .965 at 60° Fahr. We certainly expected to see this conclusion stated in the next revision of the U. S. Pharmacopoeia, wherein the latest authentic information on such points should be set forth, but are surprised to see the requirement of S. G. .975 to .990 at 50° Fahr.

Of the last 6,276 pounds of oil bay distilled by us the lowest specific gravity at 60° Fahr. was .940 and the highest 1.021, according to the portion of the run from which the cans tested were taken, neither extreme representing a complete distillation. The average of this entire quantity, if bulked in one tank, would have been .96475 + at 60° Fahr. by actual calculation, which confirms the result of our investigations in 1888. Therefore, we do not accept the U. S. Pharmacopoeia as correct, believing that the oil tested for this particular report must have been distilled from bay leaves which had been deprived of some proportion of their volatile properties, accidentally or otherwise. A work of this nature should, we think, have contained a more comprehensive statement, giving the *mean* specific gravity which a pure oil should show.

The oil bay we are regularly delivering under our brand tests as near .965 as is practicable, and on the above basis is as perfect an oil as can be made.

While we much regret the necessity of thus directly taking issue with the U. S. Pharmacopoeia, we feel forced to do so in self-protection.

The main point under consideration is evidently the question as to whether a pure and normal oil of bay has a specific gravity embraced within the limits assigned to it by the U. S. Pharmacopoeia of 1890, namely "0.975 to 0.990 at 15° C." or whether the standard should be placed at "about 0.965," in accordance with the views expressed by the manufacturers above quoted.



In the statements of the latter the intimation is clearly presented that those adopting the higher standard of specific gravity were not competent to judge in this matter, that authentic information had not been obtained, or that "the oil tested for the purpose of the revision of the Pharmacopoeia must have been distilled from bay leaves which had been deprived of some proportion of their volatile properties, accidentally or otherwise."

Our views on the essential points of this discussion may be quite briefly expressed, for we believe that no prolonged argument is required to demonstrate that a standard of 0.965 is considerably too low for the average specific gravity of a pure and normal oil of bay. We also regard it much less practicable to assign to this oil or to most others a so-called "mean specific gravity," restricted to a single value, such as 0.965, than to state the limits, when these are known, within which the specific gravity of oils from different distillations or a series of distillations may fluctuate. This view respecting this particular physical character of the essential oils finds expression in all the Pharmacopoeias, as well as in the various widely consulted reports of our Leipsic house (Messrs. Schimmel & Co.). It is true that in some oils, notably those of orange and lemon, as the experiments conducted in our German and American laboratories have shown, the specific gravity of pure products ranges within very narrow limits, while in others a much greater variation may occur, and of the latter class an example is afforded by the oil of bay.

Bay leaves, as is well known, afford on distillation a so-called "heavy oil" and a "light oil," or those which are respectively heavier and lighter than water, and it is only by the combination of these that a normal oil of bay is obtained. The specific gravity of the product is naturally dependent upon the relative proportion of the two oils yielded by the leaves, and according to our experience variations in these proportions are attributable, at least in part, to the relative freshness of the leaves, and the season in which they are collected. While we have occasionally obtained oils having so low a specific gravity as 0.965, the average of numerous distillations of the finest quality of leaves is considerably higher, and is, in fact, within the limits adopted by the U. S. Pharmacopoeia of 1890. For example in a series of distillations, each comprising many thousand pounds of the leaves, we have found the finished products or the combined light and heavy oils, to have specific gravities at 15° C. ranging as follows:

0.965, 0.967, 0.975, 0.976, 0.978, 0.981, 0.982, 0.984, 0.986, 0.987.

These examples of oils having a specific gravity ranging from 0.975 upward, could be frequently repeated in our experience, while, as previously stated, it is rather exceptional to obtain an oil having so low a specific gravity as 0.965. Specimens of oil of bay distilled in the West Indies, we have also found to have specific gravities within the limits adopted by the Pharmacopoeia, for example, 0.979 and 0.980.

In view of the fact that a pure oil of bay may occasionally have a specific gravity as low as 0.965, it would not seem improper that this should be accepted as the lowest limit. By no means, however, should a specific gravity of 0.965, or "about 0.965," be considered a pharmacopoeial "standard of quality," or even to represent a mean or average specific gravity of this oil.

The most recent and, in fact, the only somewhat comprehensive chemical exam-

ination of this oil, was that made a few years ago by Dr. Otto Mittmann (*Archiv. der Pharmacie*, 1889, pp. 529-548, and Schimmel & Co.'s *Bericht*, October, 1889, p. 6). This investigation, which was conducted with oil distilled by us, from leaves imported directly from St. Thomas, showed the oil to contain terpenes, including pinene, probably dipentene, and a polyterpene, together with eugenol, which is the most essential constituent, and a very small amount of the methyl ether of eugenol.

A further chemical examination of the oil of bay is now in progress in our Garfield laboratories. This promises to afford some interesting results, which will be communicated later.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Stamping Compound.**—A. S. writes: "Please publish a formula for a liquid stamping compound for use in stamping linen, cotton, etc., to be embroidered."

The liquid commonly used for this purpose consists of a thin starch paste colored with ultramarine or other suitable coloring material.

Powders are generally used for stamping embroidery, and blue stamping powder is prepared as follows:

Equal parts resin, damar, copal, sandarac, Prussian blue, ultramarine and bronze powder. The gums are first to be thoroughly triturated and mixed by passing through a sieve, and the other ingredients carefully added. Other colors may be made by using chrome yellow, burnt or raw sienna, raw or burnt umber, van-dyke brown, etc. For stamping fabrics liable to be injured by heat the stamping is done by moistening a suitable powder with alcohol and using it like a stencil ink.

**Lyon's Kathairon.** M. R. A.—The formula given below furnishes a preparation nearly identical in character and color:

Castor oil.....	1 fl. ounce
Tincture cantharides.....	1 drachm
Oil bergamot.....	30 minims
Stronger ammonia.....	1 drop
Alcohol.....	3 fl. ounces

Mix the oils, ammonia and alcohol, adding the tincture of cantharides lastly.

**Percentage Solutions.** Student.—The printing of tables such as you describe would not be nearly so useful as a few simple rules. Caspari thinks it is the simplest and safest plan to make percentage solutions of salts according to one fixed rule by weight, choosing the quantities nearest to the desired volume. For instance, we know that distilled water at 60° F. is assumed to weigh practically 456 grains (U. S. P. 455.7 grs.) per fluid ounce, and this can be our guide in determining the proper proportions for a solution. As an example, take a 2 per cent. solution of any soluble chemical; to have 2 fluid drachms of this solution, we would take 2½ grains of the chemical and 122½ grains of distilled water, and to have 4 fluid drachms of a 4 per cent. solution we would take 10 grains of the chemical and 240 grains of distilled water; in either case our fin-

ished solution would be slightly more in volume than needed, and this trifling excess could be thrown away. If larger volumes are to be prepared, a closer calculation could be made so as to avoid possible waste of expensive material. For instance, if 8 fluid ounces of a 5 per cent. solution are wanted of cocaine hydrochloride, we would say 8 fluid ounces of water will weigh 3,648 grains; hence we shall make a quantity of solution nearest to it in weight and yet insure our volume. This we find to be 3,850 grains, and of this weight 5 per cent. is 192½ grains; we must therefore use 192½ grains of the cocaine salt and 3,657½ grains of water, yielding a trifle over 8 fluid ounces of solution. If two or three substances are to be present in a percentage solution their combined weights must be subtracted from the desired weight of the finished product, in order to find the proper quantity by weight to be used of the solvent. For instance, a physician desires 1 fluid ounce of a 4 per cent. cocaine solution containing 2 per cent. of boric acid: the quickest way to make it would be to dissolve 20 grains cocaine hydrochloride and 10 grains of boric acid in 470 grains distilled water, and of this solution measure 1 fluid ounce; the excess of volume would be found very trifling.

**Monobromate of Camphor Pills.**—E. E. H. writes: Please inform me how to proceed in compounding the following:

Camph. monobrom.....	3 i
Ergotin.....	2 ii
M. ft. pil. No. xxx.	

Reduce the camphor monobromate to an impalpable powder and incorporate the ergotin; mass with extract of taraxacum or gentian. The ergotin (extract of ergot) should be of a firm consistency; if too fluid, evaporate on a water bath until of proper consistency. It is difficult to make a satisfactory pill of this combination; capsules work better.

**Cathartic Soda Water Syrup.**—C. H. M. writes: "Please give a formula for making a pleasant tasting cathartic syrup for soda fountain use."

As cascara and allied vegetable extracts are inadmissible owing to their persistent taste and odor, we are almost restricted to the use of active principles having cathartic properties.

A mixture of jalapin, aloin, podophyllin and similar principles, combined with carminatives and flavoring ingredients would seem to be indicated, the proper proportion of each would have to be decided by experiment.

## Correspondence.

### "Thesperine." (?)

**Editor AMERICAN DRUGGIST:**

A customer brings me some prescriptions written by a physician in a neighboring town. He (the customer) told the physician he would bring them to me in preference to having them filled by the local druggist, upon whose blanks they were written. One of them is as follows:

Ammon chlorid.....	3 ss
Thesperine (?).....	3 iv
Aqua destil q. s.....	3 vi

M. Sig. Teaspoonful as a gargle 3 times per day.

Now I don't know what is meant by "Thesperine," and while it is just possible that some proprietary article bears that title, I am disposed to think it a case of collusion between the physician and the druggist, the title "Thesperine" being

agreed upon between them to represent some substance well known by another title. This view is given color by the fact that this physician is proprietor or "promoter" (both, I think) of "Thespian Springs," a mineral spring of local fame. If there is any such substance as "Thesperine," of which, as a pharmacist, I should have knowledge, will you please set me right, and oblige  
E. N. MOODY.  
CLARKSVILLE, MO.

[If there is a medicinal substance bearing this name in use by physicians we are not aware of it. It is possible, however, that our correspondent has not made a careful copy of the prescription. We have not seen the original and it may be that "phosferine" was intended. This is a solution of chloride of iron and phosphoric acid to which glycerin is added, and it is used to some extent in the New York clinics, though not always under this title.—Ed.]

### A Lesson in Physics.

Editor AMERICAN DRUGGIST:

DEAR SIR: Here is an incident that actually occurred to my experience, and which may prove of interest and amusement to your readers, illustrating a law in physics. A clerk prepared a simple syrup, and strained it while hot into a bottle. Some of the syrup running on the sides, Esculape placed the 1 gal. bottle in the sink, and turned the cold water on in order to wash off the sides; he, in the mean time, looking out of the window. When sufficient time had elapsed he raised the bottle and remarked to me: "See how light it is!"

The bottom was gone, so was the syrup.  
H. ORNSTEIN.

NEW YORK.

### Quiz Box.

*This series of questions will be continued each week. The answers to each series of questions will appear in their issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.*

*Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.*

Address Editor Quiz Box, 37 College place, New York.

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elixirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

### Answer to Questions; Tenth Series.

111. In 1790, during the French revolution, when everything was in a state of change, Prince Talleyrand rose in the French Assembly and proposed the formation of a new system of weighing and measuring, to be founded upon some natural standard. The matter was referred

to the French Academy of Sciences, who invited scientific men from other countries to act with them. As a result many representatives from foreign countries met in Paris and, with five of the most prominent members of the academy, astronomers, physicists and mathematicians, prepared a report which was submitted to the academy March 19, 1791, and the results incorporated in this report may be considered the foundations of the Metric system. At first two units were proposed, both to be taken from some dimension of the earth itself. One of these units was to be taken from the quadrant ( $\frac{1}{4}$  part) of the earth's equator, but this idea was soon abandoned in favor of the quadrant of the meridian, since, as they said, the equator passes through but few places upon the globe while every country has meridians passing through it.

The committee recommended that the ten-millionth of the one-fourth part of the meridian passing through Paris be considered as the unit of length and be called a meter, and instead of measuring it in degrees, minutes and seconds, as such measurements are generally made, they proposed the use of a decimal scale for the purpose.

They suggested the measurement of an arc of the meridian passing through Dunkirk (France), Paris and Barcelona (Spain), and from this measurement to determine the exact length of the quadrant. This report was accepted by the assembly March 26, 1791, and the academy was given full power to carry out the suggestions they had reported. Mechain and Delambre were appointed to make the delicate measurements necessary, and after seven years' work completed the task of measuring the arc between Dunkirk and Barcelona. The final report of the committee was presented April 30, 1799; it was accepted and by the law of 1799 became the standard of France, but was not generally adopted until 1837 when a law compelling its exclusive use after January 1, 1841, was enacted. Since that time it has been legalized or adopted by most of the great nations of the world.

The report of the committee gave to the meter a length of 39.37079 British inches, and this length was inscribed upon a bar of platinum, and deposited in the vaults of one of the public buildings, with other archives, and is now referred to as the "metre des archives." From this bar other copies have been made and distributed throughout the world.

Subsequent measurements show that this meter was slightly in error, but as the error is known we can apply the correction and obtain correct results. It was also decreed by this same committee that the unit of capacity should be a cubic vessel  $\frac{1}{10}$  meter on a side, to be called a cubic decimeter, and its capacity to be called one liter. When filled with distilled water at its greatest density ( $4^{\circ}\text{C}$ .) this vessel would hold a weight to be called one kilogramme, made up of 1,000 equal parts, to be called grams. Each gram is, therefore, the weight of a cube of water  $\frac{1}{1000}$  of a meter on a side, or one cubic centimeter.

112. The following units are used in the metric system:

Meter, unit of length, relation or equivalent, 39.3708 inches.

Are, unit of surface, 119.6 square yards.

Stere, unit of solids or volumes, 1.308 cubic yards.

Liter, unit of capacity, .908 of a dry quart. 1.0567 wine quarts.

Gram, unit of weight, 15.432 grains.

113. An imperial gallon contains 277.274 cubic inches.

Imperial pint (1-8 gallon) =  $277.274 \div 8 = 34.659$  cubic inches in one pint.

1 Meter = 39.37 inches; 1 cubic M. =  $39.37 \times 39.37 \times 39.37 = 61027.05$  cubic inches.

1 Liter or 1-1000 of a cubic metre =  $61027.05 \div 1000 = 61.027$  cubic inches.

61.027 (cubic inches in one liter)  $\div 34.659$  (cubic inches in one pint) = 1.76.

There are, therefore, 1.76 imperial pints in 1 liter.

114. At the last revision of the Pharmacopoeia it was resolved to measure all liquids and weigh all solids.

Therefore, of solids parts means parts by weight, of liquids parts by measure, but even now some thick or dense liquids are weighed when great accuracy is desired, and it would, undoubtedly, be better to weigh all liquids if time would allow.

The formulæ for extracts, fluid and solid, are good illustrations of the application of this principle.

Extractum hydrastris fluidum.

Hydrastris (in No. 60 powder), 1,000 grams.

Glycerin, 100 cubic centimeters.

Alcohol,

Water, aa. q. s., to make the product 1,000 cubic centimeters.

Here a gram is a weight part and a cubic centimeter is a volume or measure part, and in the end 1 cc. represents one gram of the hydrastris.

115. 1 fluid ounce of water = 455.7 grains  $\times 18 = 5924.1$  grains in 18 ounces of water. 1 gram = 15.43 grains.  $5924.1 \text{ grs.} \div 15.43 = 383.93$  grs. in 18 fluid ounces of water. Chloroform has a specific gravity of 1.490; it will, therefore, weigh 1.490 times as much as 18 fluid ounces of water.  $383.93 \text{ grs.} \times 1.490 = 572.05570$  grains in 18 fluid ounces of chloroform.

116. 75 grains of an equal mixture of glycerin and alcohol will have 37.5 grains of each constituent.

The question then becomes, how many minims will 37.5 grains of each measure; their sum is the answer.

1 minim of water weighs 0.949 grains.

1 minim of alcohol (sp. gr. 0.820) weighs  $949 \times 820 = 0.7781$  grains. 37.5 (weight of alcohol)  $\div 0.7781$ , weight of 1 minim, = 48.18 minims. Alcohol measures 48.18 minims.

0.949 (weight of 1 minim of water)  $\times 1.250$  (sp. gr. of glycerin) equals 1.18625 grains (weight of 1 minim of glycerin)  $37.5 \div 1.18625 = 31.61$  minims of glycerin. (Alcohol)  $48.18 + 31.61$  (glycerin) = 79.79 minims, measure of the mixture.

117. 1 kilogram of alcohol weighs 1,000 grams or 15,432 grains; 1 fluid ounce of water weighs 455.7 grains.

Sp. gr. of alcohol (U. S. P.) 0.820; 1 fluid ounce then weighs  $0.820 \times 455.7$  or 373.674 grains.

15,431 (grains in 1 kilogram)  $\times$  the weight of 1 fluid ounce of alcohol, 373.674 grains, = 41.29 fl. ounces of alcohol in 1 kilogram.

118. Winchester bushel, the dry measure of capacity (U. S.) = 2,150 cu. in. 1 bushel = 4 pecks = 32 quarts. 1 quart then =  $2,150 \div 32 = 67.20$  cu inches in Winchester quart. 67.20 cu. in. = 37.22 fluid ounces.—In practice, however, the term is applied to a bottle of the capacity of 40 imperial fluid ounces.

119. 231 cu. in.  $\times 50$  gallons = 11550 cu. in. 1728 cu. in. in one cu. ft., 6.684 cu. ft. in 50 gallons. The box will need to have its dimensions such that when length, breadth and height (all equal) are multiplied together the product shall be 6.684 ft. Cube root of 6.684 = 1.88 feet, or 1 foot 9 and .8 inches long, broad and high are the dimensions.

120. Such a mixture will have 2.5 pounds ether and the same weight of glycerin.

2.5 pounds Av. =  $7,000 \times 2.5 = 17,500$  grains.

1 fluid ounce of water = 455.7 grs.

Specific gravity of ether varies from 0.725 to 0.728; taking it at 0.728 1 fluid ounce will weigh  $455.7 \times 0.728 = 331.7496$  grs.

Glycerin (sp. gr. 1.250) 1 ounce will weigh  $455.7 \times 1.250 = 569.625$ .

$17,500 + 331.7496 = 52.78$  fl. ounces of ether.

$17,500 + 569.625 = 30.72$  fl. ounces of glycerin.

$52.78 + 30.72 = 83.50$  fl. ounces = 5 pints, 8 ounces and 4 drams.

### Names of Students Whose Grade Stood 75 on the Tenth Series.

James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wisconsin, Pa. T. H. Brennenman, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstien, S. Dak. G. E. Barksdale, Richmond, Va.

Miss Maude Florence Cain, Lancaster, Pa. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn. H. J. Force, Newark, N. J.

William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavelle, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Mills, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn.

W. B. Nethery, Toronto Junction, Ont. Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S. Aberly Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.

Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.

W. H. Van Strander, Winsted, Conn. Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

### Questions: Thirteenth Series.

#### BOTANY.

References: Gray's Structural and Systematic Botany, Bastin's Botany, or Culbreth's Pharmaceutical Botany.

141. Give the distinctive differences between endogenous and exogenous plants

142. What are laticiferous ducts and what is their function?

143. What is the cambium layer and what are its functions?

144. To what principle is the coloring of leaves due?

145. What is sclerenchymatous and what is parenchymatous tissue.

146. Explain the relations indicated by species, genus, natural order, division and class

147. Name all the plants of the natural order umbelliferae which furnish official drugs or preparations, giving the botanical name, habitat, active constituents and part used.

149. Give the botanical names, habitat and part of the plants entering in any way into the composition of compound cathartic pills.

150. Give the names of the official drugs of the order of hydropyellaceae.

**Ergotinum Gallicum.**—This is a mixture recommended warmly by Dr. Blaschko in the treatment of pulmonary hemorrhage; its composition is as follows:

	Grammes
Acid gallic.....	1.00
Ext. ergot.....	1.00
Aqua destill.....	25.00
Syrup.....	25.00
Sig.: A teaspoonful every hour.	

## Student's Column.

### Organic Materia Medica of the U. S. P.

[Continued from Page 264.]

#### Anisum. Anise: aniseed.

BOTANICAL NAME.....Pimpinella Anisum.  
NATURAL ORDER.....Umbelliferae.  
HABITAT.....Scio, Egypt, Asia; cult. in Mal'a, Spain and Germany.  
CONSTITUENTS.....Volatile and fixed oils, (3 and 3.38 per cent.).  
PROPERTIES.....Carminative, stimulant.  
PART USED.....The fruit.  
PREPARATION.....

Dose—Oil Cc. 0.30.

#### Anthemis. Chamomile; Roman or English Chamomile; Garden Chamomile; Low Chamomile; Camomile; Ground Apple; Whig Plant.

BOTANICAL NAME.....Anthemis nobilis.  
NATURAL ORDER.....Compositae.  
HABITAT.....Southern and Western Europe, cult. in Germany, Great Britain, France and Belgium.  
CONSTITUENTS.....Volatile oil, tannin, resin (5.25 per cent.), wax (.10 per cent.).  
PROPERTIES.....Mild stimulant tonic.  
PARTS USED.....The flower heads.

Dose—Infusion Cc. 60.00—120.00

#### Apocynum. Canadian Hemp; Black Indian Hemp; Bowman's Root; Indian Physic.

BOTANICAL NAME.....Apocynum Cannabium.  
NATURAL ORDER.....Apocynaceae.  
HABITAT.....North America.  
CONSTITUENTS.....Glucoside bodies (Apocynin, apocynin), tannin, gum, resin, starch, wax.  
PROPERTIES.....Emetic, cathartic, and anti-periodic.  
PART USED.....The root.  
PREPARATION.....Fluid extract.

Dose—Fluid extract. Cc. 0.3—1.00 of 2.00.

#### Arnica Flores. Arnica Flowers; Leopard's bane; Mountain Arnica; Mountain Tobacco; Wolfsbane.

BOTANICAL NAME.....Arnica Montana.  
NATURAL ORDER.....Compositae.  
HABITAT.....Europe, North America and Asia.  
CONSTITUENTS.....Several resins, oil and volatile acid.  
PROPERTIES.....Stimulant; externally sedative.  
PARTS USED.....The flower heads.  
PREPARATION.....Tincture.

Dose—Tincture Cc. 0.60—4.00.

#### Arnica Radix. Arnica Root.

BOTANICAL NAME.....Arnica Montana.  
NATURAL ORDER.....Compositae.  
HABITAT.....Europe, North America and Asia.  
CONSTITUENTS.....Several resins, volatile oil, inulin (10 per cent.).  
PROPERTIES.....Stimulant; narcotic; diaphoretic externally sedative.  
PART USED.....The rhizome and roots.  
PREPARATIONS.....Extract; fluid extract and tincture.

Dose—Extract Cc. 0.50—0.70; Fluid Extract Cc. 0.60—2.00; Tincture Cc. 0.60—4.00.

#### Asafoetida. Asafoetida; Devil's Dung; Foed of the gods.

BOTANICAL NAME.....Ferula foetida.  
NATURAL ORDER.....Umbelliferae.  
HABITAT.....Persia, Afghanistan and the Punjab; enters commerce by way of Bombay.  
CONSTITUENTS.....Gum (30-40 per cent.), resin (45-70 per cent.) ferulic acid.  
PROPERTIES.....General and local stimulant; antispasmodic.  
PART USED.....The gum resin.  
PREPARATION.....Emulsion; pill of aloes and asafoetida; pill of asafoetida; tincture of asafoetida.

Dose—Powder Gm. 0.50—1.00; Emulsion Cc. 16—32.

#### Asclepias. Pleurisy Root; Butterfly Weed; Wind Root; Silkweed; Tuber Root; White Root; Flux Root; Orange Swallow Wort.

BOTANICAL NAME.....Asclepias tuberosa.  
NATURAL ORDER.....Asclepiadaceae.  
HABITAT.....Canada and United States, south to Florida, and west to Texas and Southern Colorado.  
CONSTITUENTS.....Starch, tannin, two resins, fixed oils, glucoside.

PROPERTIES.....Emetic, expectorant and anodyne.  
PART USED.....The root.  
PREPARATION.....Fluid extract.

Dose—Fluid Extract Cc. 1—4.

#### Aspidium. Male Fern; Male Shield Fern; Bear's Paw Root; Sweet Brake.

BOTANICAL NAME.....Dryopteris Filix-mas and Dryopteris marginalis.  
NATURAL ORDER.....Filices.  
HABITAT.....Canada and the United States.  
CONSTITUENTS.....Oleoresin, silicic acid, tannin.  
PROPERTIES.....Anthelmintic.  
PART USED.....The rhizome.  
PREPARATION.....Oleoresin.

Dose—Oleoresin Cc. 0.40—0.45.

#### Aspidosperma. Quebracho.

BOTANICAL NAME.....Aspidosperma Quebrachoblanco.  
NATURAL ORDER.....Apocynaceae.  
HABITAT.....South America.  
CONSTITUENTS.....Six alkaloids soluble in alcohol, ether and chloroform, viz.: aspidospermine, aspidospermatine, aspidosamine, quebrachine, quebrachamine, hypoquebrachine.  
PROPERTIES.....Respiratory sedative; antispasmodic.  
PART USED.....The bark.  
PREPARATION.....Fluid extract.

Dose—Fluid Extract Cc. 1—4.

#### Aurantii Amari Cortex. Bitter Orange Peel.

BOTANICAL NAME.....Citrus vulgaris.  
NATURAL ORDER.....Rutaceae.  
HABITAT.....Southern Europe, West India Islands, Southern Florida.  
CONSTITUENTS.....Bitter principle (hesperidin), volatile oil, gum, albumen.  
PROPERTIES.....Aromatic bitter tonic.  
PART USED.....The rind of the fruit.  
PREPARATIONS.....Fluid extract, tincture.

Dose—Fluid Extract Cc. 4; Tincture Gm. 4—8.

#### Aurantii Dulcis Cortex. Sweet Orange Peel.

BOTANICAL NAME.....Citrus Aurantium.  
NATURAL ORDER.....Rutaceae.  
HABITAT.....Warm countries.  
PROPERTIES.....Mild digestive stim. and flavoring.  
PART USED.....The rind of the fresh fruit.  
PREPARATIONS.....Syrup, tincture.

Dose—Tincture Cc. 4—8; Syrup ad lib.

(To be Continued.)

**The Microchemical Determination of Iodine.**—According to the *Journal de Pharmacie et de Chimie* Denigès adds a small quantity of the liquid to be tested, to potassic lye until a slightly alkaline reaction ensues. He then adds a drop of acetone, and follows with solution sodium hypochlorite drop by drop. When only traces of iodine are present, a whitish turbidity soon results, condensing into bright yellow small crystals of iodoform. Iodates are previously reduced by adding a trace of sodium-thiosulphate solution.

**An Explosion.**—At the Therapeutical Society of Paris M. Créquy called attention to the following accident, which he had had. As a dentifrice he had to dispense:

Potassium chlorate.....	5 grammes
Borax.....	10 grammes
Magnesia.....	10 grammes
Prepared chalk.....	10 grammes
Oil of peppermint.....	11 drops
Saccharin.....	5 grammes

The pharmacist mixed the chlorate of potash and the saccharine together in a mortar of all things. He was saved the trouble of finishing the prescription, however, for a violent explosion resulted, and he was badly burnt. The great imprudence in rubbing violently together a 10 per cent. mixture of saccharin with potassium chlorate is self-evident, and has, unfortunately, been shown before by English chemists with the same inevitable result.—*British and Colonial Druggist*.

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record.*

### Simple Simplicity.

THE BILLHEAD, THE BUSINESS CARD AND THE CIRCULAR.

BY NATH'L C. FOWLER, JR.

I can remember a billhead, a business card, and a circular without twice too much matter upon them, but I have forgotten when and where I saw these remarkable productions.

As about one hundred people out of one hundred say too much in their advertising, so do these people put too much into every class of printed matter they inflict upon the public.

It is presumed that the merchants send out printed matter because they want people to read it. If people won't read it there is no use in having it.

The business man reads it himself, and it reads well. He is familiar in the premises.

Because he reads it he thinks everybody else will.

Let that business man go into the seclusion of his back office, close the blinds, pull down the shades, sit himself down and look at himself in the darkness of his own surroundings, and ask himself if he reads other people's circulars and cards.

I present his answer as the strongest argument to my statement that nearly all printed matter is over-done, too long, too technical, and generally falls flat upon the public.

I will discuss the three principal articles of printed ware each by itself.

The billhead is not an advertisement, and has no right to take the place of an advertisement.

The billhead is simply a connection between the seller and the buyer, suggesting that the seller would like to have that part of the buyer's money due him.

There is no room on the billhead for an enumeration of all the things the seller keeps and does.

Use some general title which is supposed to cover the business.

Most concerns sell from a dozen to a thousand different articles.

It is as sensible to print them all upon the billhead as to print a dozen of them.

There is no objection to printing a specialty upon a billhead, but that is not essential.

Terms should be given, and any other information relative to the payment of the bill.

There is no excuse for printing anything other than these upon the billhead.

One-half the billheads are printed in fancy type, frequently so that the name cannot be spelled out, and very often the address appears in some Old English or script letter, so that the receiver does not know for a certainty what the address is.

In one-half of the billheads the State is left out, and as the majority of towns are duplicated in nearly every State, people outside of the State are not sure of the location of the town.

The name should be printed in plain type, because most bills are paid by

checks, and it is quite essential that a check be made out properly.

The town and State should be set in equally as plain type, because most folks send remittances by mail, and the town and State are all important.

Script type should never be used on a billhead.

Plate No. 1 presents in reduced size an example of a conventional billhead, set as the majority of billheads are set.

Plate No. 2 presents the same billhead, set entirely in one series of type, the different sizes being used.

*Smithville,.....189*

M.....

**Bought of John Smith & Co.**

Dealer in Everything from Everywhere. Special  
attention given to all orders. Choice everything  
constantly on hand. Fine things for everybody

**44 SMITHVILLE AVE.**

PLATE NO. 1.

It is always advisable to use in a billhead one series of type throughout. It makes a neater job. It is more artistic, because it is simple, and simplicity is true art. It is pleasing to the eye, the har-

Smithville, N. Y. \_\_\_\_\_

M \_\_\_\_\_

**Bought of JOHN SMITH & CO.,**

**DISPENSING CHEMISTS.**

Terms: 10 Days. **44 SMITH AVE.**

PLATE NO. 2.

mony is perfect, and it gives an always advisable distinctness to the firm's printing.

The ideas suggested for a billhead apply partially to a business card.

A series of type should be used throughout, and the firm name and address must be as distinct as possible.

The business card admits of more printed matter.

The merchant is justified in adding his specialties to the business card, and printing upon it information calculated to present his business in its general entirety.

**JOHN SMITH & CO.,**

**APOTHECARIES**

*Prescriptions carefully compounded,  
Toilet Articles, Trusses, Patent  
Medicines, etc.*

**44 SMITH AVE., SMITHVILLE.**

PLATE NO. 3.

Plate No. 3 presents a business card of the conventional style, no worse than a large proportion of the business cards now in circulation.

Plate No. 4 presents the same card re-set in an effective way.

It will be noticed that in the first example all of the specialties are made prominent, while in the second example the general business is presented in large type, the specialties appearing in smaller type, which much improves the appearance of the card.

**JOHN SMITH & CO.,**

**DRUGGISTS,**

Prescription Department  
in charge of  
ALBERT B. DORA, Ph.G. **SMITHVILLE, N. Y.**

PLATE NO. 4.

Circulars are without limit of style, size, and wording. In a subsequent article I will discuss these, and attempt to present examples of effective ones set in the extreme of simplicity and brevity, that the reader may absorb the entire argument at a glance.

### Label for Petrolatum.

A. C. Searles, a well-known New York druggist, has adopted the following label for petrolatum:



It is the opinion of a few in the trade that the design might be improved still further by substituting the word "Jelly" for ointment. On the whole the idea is a good one.

### At the Soda Counter.

"It is interesting to see how differently people drink," said a Portland soda counter boy. "Some people never lift their eyes over the rim of their glass; others look all around the store, and read every label. I used to have a curious customer. A little nervous man who went up and down on his toes when he drank; every time he raised the glass to sip he went up and then down again, and I always had to turn my head to avoid his seeing me smile. It's curious, too, about colors. Now blondes usually prefer the colored fruit juices, while dark complexioned people take the plain varieties. And another thing I have noticed is that anyone in a hurry will always drink the glass dry, partly from nervousness, I suppose. Yes, we see some funny sights, but one of the best was when a young man-about-town came hustling in one evening with his best girl, ordered two lemon ices, and putting his hand in his pocket found he had left his change in his other trousers. He turned red, then white, and looked at me appealingly. I tumbled, and said, 'that's all right, old man,' and the girl looked conveniently the other way. He thanked me the next day."

## New York.

O. G. Kalish of the Kalish pharmacy, Fourth avenue and 23d street, has adopted several striking methods of attracting attention to his model establishment. Chief of these is a glass instrument of intricate construction, which is exposed in the show windows and designed to illustrate the circulation of the blood. It attracts a great deal of attention and many pharmacists have made inquiries as to where duplicates may be obtained, but Mr. Kalish is keeping this a secret for the present as he does not wish the novelty of his instrument interfered with. As any philosophical instrument maker is likely to keep the instrument in stock or should be able to procure it, there is a likelihood of it becoming common. Another window attraction employed by Mr. Kalish consists of a large glass jar containing fluids of different specific gravities. The lowest strata is composed of a layer of mercury, and following this are successive layers of glycerin, water, oil and alcohol, colored to make an attractive exhibit.

Rumors are afloat that it is Geo. Seabury's intention to visit Europe in the Fall. When approached on the subject Mr. Seabury would neither deny nor affirm the accuracy of the rumor. He said, however, that it was unlikely that he would be able to attend the Asheville meeting of the A. P. A., as he intended visiting Maine about the time the association proposed to meet. Mr. Seabury admits that he has never been a success as a mariner. "Why," he said, "the mere mention of a trip to Europe makes me seasick. No, solid earth is joy sufficient for me. The odor of marine ropes or tar invariably suggests everything else than poetic emotions, and past experiences crossing the deep blue sea always awaken sad recollections." It is quite probable that Mr. Seabury will make the trip. There is more than mere hearsay behind the present rumor.

The action brought by the New York and Cuba Mail Steamship Company against McKesson & Robbins, to recover a fine imposed in 1887, by Cuban customs authorities on the *Cienfuegos* for having on board opium which did not appear on the manifest, was stopped on the 6th inst. by consent of the parties. It was agreed that each side shall pay one half of the fine, which with interest, amounts to more than \$8,000. The evidence taken during the day and a half when the case was on trial showed a smuggling conspiracy between some employees of McKesson & Robbins and of the steamship company, but absolved the firm, it being shown that they sold the opium for cash to a man named Fernandez before it was removed from the warehouse.

A movement is under way in local drug and chemical circles to organize a club to promote a fraternal feeling, and to have central headquarters where members could dine and meet each other daily. The matter has been under discussion for several days, and about 25 representatives of various houses in the trade have signified a desire to join such an organization. The arrangements are in the hands of Messrs. R. W. Phair and W. W. Dixon. A meeting has been called for Saturday this week, after business hours, at the Astor House, to take definite action.

J. C. Smith of Smith & LaRocque, Plattsburg, has been recuperating in the vicinity of New York City for the past ten days. During the winter Mr. Smith had a severe attack of grippe, and has suffered much since from its sequelae.

Mr. Smith has divided his vacation between driving and deep-sea fishing, and will carry back to his fresh-water home the tan and tales of an old tar.

J. Rothenberg & Co. have opened all three of their stores at Long Branch and anticipate a very profitable season. They have done a very good business during the winter at the village store and also at the West End store, which was kept open all winter. Mr. Rothenberg will, as usual, be ably assisted by James C. Seiler who has been with Mr. Rothenberg for many years.

John J. Skelly, who was with Hegeman for many years, has a store at 309 East Fourteenth street, and can now have a little more leisure as his son was among the graduates at the College of Pharmacy this spring and shows a marked aptitude for the business.

Among the visitors in New York the drug market during the past week we have noticed J. E. Eliel of the Lyman, Eliel Co., Minneapolis, and Horace Burroughs of the Burroughs Bros.' Manufacturing Co., Baltimore.

Henry Schweitzer, for many years on Ninth avenue, between Nineteenth and Twentieth streets, who has been out of business for the last ten years, will open a magnificent store on Ninth avenue, between 30th and 31st streets.

Smith Ely Jelliffe, M.D., has been appointed to succeed the late O. G. Harrison as instructor in materia medica and botany in the College of Pharmacy of the City of New York.

Dr. R. A. Davis, formerly of 838 Eighth avenue, is to open a store at the corner of Amsterdam avenue and Twenty-sixth street, where he is fitting up a very handsome place.

W. C. Fiske, M.D., has opened a very large and handsomely fitted up store at Eighth avenue corner of Forty-seventh street.

J. F. Cumberford has opened an elegant new branch store at Fifty-ninth street and Eighth avenue.

Geo. E. Tappenden has entirely recovered from the slight ailment of his foot which has confined him to his room for some time.

Frederick K. James of 44th street and Eighth avenue sailed for Europe last week and will make an extended tour of the continent.

Henry Allen, the successful dealer in and manufacturer of druggists' glassware, sailed for Europe on the Umbria last Saturday.

James W. Tufts & Co. have just sold to Hiram Ricker & Son a beautiful onyx fountain for the latter's store in New York City.

Sam Rosenstock, formerly of 41st street and Seventh avenue, opened up a very nice store at Broome and Garrick streets.

Leopold Freiburger has refitted his store at 1156 Second avenue in the very latest and most attractive style.

Geo. A. Luria, formerly of 1 Division street, New York, has just opened a store at 482 Seventh avenue, Brooklyn.

M. R. Mandelbaum took a little journey down along the Jersey coast the first of this week for Tilden & Co.

Jos. Jacobs, the widely-known Atlanta pharmacist, was in town last week.

## Boston.

An important meeting of the Malden Druggists' Association was held recently, which was attended, by invitation of this association, by druggists from Everett, Medford, Stoneham, Cambridge and East Boston. President W. B. Southworth was in the chair, and Secretary C. A. Charles occupied his accustomed place. The absorbing topic was the action of Malden's aldermen in refusing to grant any sixth-class licenses and subsequently ordering all druggists to remove their supply of liquors so that for a time prescriptions for the ardent were not filled. The association was fortunate in securing the attendance of a gentleman who has made a study of the Massachusetts liquor laws in so far as they relate to the drug trade. This person was none other than President William W. Bartlett of the Massachusetts Druggists' Alliance, and he made a lengthy address in which he explained the intricacies of these laws. The action taken as a result of this meeting is not to be made public at present, but from the information at hand it can be safely assumed that Mr. Bartlett suggested some way out of the dilemma in which the Malden drug trade found itself.

The puritanical mayor of Everett has decided to enforce the "blue laws," and the sale of cigars, candy, etc., upon the Sabbath has been strictly tabooed. The druggists, as a consequence of this order, closed their stores upon Saturday night and remained closed until Monday morning. This was more than the mayor bargained for, and now he is endeavoring to "bluff" the druggists by stating that if these tactics are persisted in, another drug store will be opened within two weeks, where medicines will be put up on Sunday. The outcome of this contest is awaited with interest, but it is presumably a spasmodic action upon the part of the authorities, which will soon die out from lack of public interest.

The Harry B. Stull who recently suicided in Buffalo, N. Y., is the same person who gained so much notoriety last year by marrying a "1492" actress in a sudden and sensational manner. Subsequently he went to South Dakota for the purpose of securing a divorce, but afterward abandoned this plan, returned East, and lived with his wife. Mrs. Stull died about six weeks before Mr. Stull ended his life, and her death is said to have unbalanced his mind. For ten years prior to his marriage he had made Boston his home, and was for a long time a clerk for John D. Knowlton on Washington street. The funeral and burial took place at Waynesboro, Pa., where his parents have their home.

C. I. Hood of Lowell, and of sarsaparilla fame—unlike most retail druggists—is the proprietor of a fancy stock farm. Fire recently visited one of the barns on this farm, and before it was extinguished 26 of the finest Jersey cattle procurable in this country had been destroyed. The loss was \$20,000; fully insured. Since the fire Mr. Hood has purchased 20 head of blooded Jersey cattle in the West.

Kelley & Durkee have secured temporary quarters at 346 Boylston street, where they will be located until their new store at 392 Boylston street is ready for occupancy. C. H. Bangs is at work upon elaborate mahogany fixtures for this new establishment.

A proposition to hold a medical and pharmaceutical exhibition in this city next year has been broached by the publisher of the *New England Druggist*, who has heretofore been very successful in such affairs.



C. H. Woodman, Haverhill, has made an assignment.

President Doliber and Vice-President Cheney of the Doliber-Goodale Co., were in Philadelphia recently upon business connected with their successful specialty.

Charles A. West has returned from his trip to New York and Washington, while in the latter city he was looking up matters connected with tariff legislation.

The Massachusetts legislature is inclined to perpetuate the adornment of buildings, fences, etc., by patent medicine "ads" for at least a year longer, judging by the recent rejection of a bill aimed to prohibit this adornment in the future.

#### Maine.

W. B. Boothby, Westbrook, has a new Low Art Tile fountain.

The store of Haley P. Thompson, Lisbon, was burglarized recently; \$47 in cash was secured by the thieves.

C. H. Guppy & Co. of Portland have placed an order with James W. Tufts & Co. for a very large and beautiful fountain; it is to be over 17 feet long.

The Freeman-Rice Medicine Company, Gray, manufacturers of patent medicines, is in insolvency. George F. McQuillan and Fred. V. Chase are assignees.

The recent conflagration at Norway seriously interfered with the business of two drug stores in that town. A. O. Noyes' store and dwelling were destroyed; loss, \$6,000; insured for \$4,000. The \$5,000 stock of F. P. Stone was partly destroyed; insurance, \$4,000.

The suit of Henry Reney of Biddeford for divorce, in which he charges his wife with attempting to poison him, has been continued until the next term of the Supreme Court. Mrs. Reney has been granted \$5 a week, pending the trial, and \$100 to cover the cost of her defense.

#### Georgia Jottings.

Tyner's soda fountain is doing a grand business in Atlanta.

The Elkin Watson Drug Co., Atlanta, have just put in an elegant Lippincott onyx fountain. They will do a good business.

The Aragon Pharmacy has moved a block higher up Peachtree street, Atlanta, to a point immediately opposite the elegant Aragon hotel.

Jacobs' large retail store in the Venable building in Atlanta is being rapidly put into shape. It will be a most elegant establishment when finished.

Dr. Daniel will open a new drug and seed business in Macon, under the title of the Daniel Drug Co. Dr. Taylor has purchased the full control of the firm of Taylor and Daniel and will continue business at his well-known stand.

Americus, Ga., probably contains the handsomest soda fountains for the size of the city of any place in the United States. Dr. Mun's fountain would prove an attraction in any of our very large cities. Dr. Davenport's fountain is also very handsome.

The next meeting of the Georgia Pharmaceutical Association will be at Savannah, Georgia, on May 22, 1895. It promises to be a most enjoyable occasion. Savannah presenting as it does so many rare and unusual forms of entertainment to the up-country people, Drs. Parsons and Kieffer will see that the occasion is a memorable one. Dr. Kieffer is local secretary.

Dr. J. W. Goodwyn, of Macon, after holding the chairmanship of the Georgia

Board of Pharmacy for a number of years resigned it at the last meeting of the board. Dr. S. B. Durban, of Augusta, was elected chairman. Both are admirable gentlemen. Dr. Goodwyn has never had any opposition to the chairmanship, and the board gave him up with regret. He still remains a member. He can always have anything he wishes, which it is in the power of the pharmacists of Georgia to give.

#### Detroit.

Frederick Stearns will spend the summer in England.

H. E. Girard, Grand Rapids, has sold his drug business to J. A. Gibbs & Co., who will continue it.

The Clover Leaf Drug Store, 297 First street, Detroit, has been removed to 1526 Woodward avenue.

S. F. Frizelle has not yet recovered from a severe illness. C. C. Curtiss is conducting the business for him.

O. E. Smith, Detroit, has purchased the drug stock of Charles Moreland, 749 Grand River avenue.

H. D. Luce, son of ex-Governor Luce, has sold his drug business at Lansing to A. O. Bauer & Co. of Grand Rapids.

H. H. Packard of Sheboygan has sold his drug store to Sangster & Gahan. The business will be continued at the old location.

The retail druggists of Windsor, Ont., recently received a notice from the wholesale dealers to at once advance the price of quinine 20 per cent.

The Keech Block at Centreville was burned recently. Bryant Weed's drug store was destroyed. Loss, \$3,400 partially insured.

The drug store corner of Myrtle and Twelfth streets Detroit, formerly owned by J. S. Bagley, is now conducted by John Ward.

T. H. Hinchman & Sons, Detroit, who were burned out several months ago, will be back in their old quarters in about three weeks.

De Smith & Co., Detroit, have started a well appointed drug store at 73 Grand River avenue. Dr. M. E. Knapp is a partner and has an office in the store.

J. G. Hackney, Detroit, has removed his stock to 91 Grand River avenue, while his old quarters are being renovated.

Otto Paul Meyer, son of the millionaire St. Louis druggist, was married last week to Miss Alice McGowan, a popular society lady of Grand Rapids.

McClellan C. Pendleton, Detroit, has purchased the interests of his partner, Mr. Bachmeyer, in their drug business at 569 Fourteenth avenue, and will continue it.

The drug store of W. H. Burke & Co., 291 Woodward avenue, Detroit, was entered by a rear window recently and robbed of all the money in the cash drawer. Nothing else was touched.

Frederick Klig was recently convicted at Detroit for robbing the drug store of C. K. Trombley, but was let off on suspended sentence. He was last week sentenced to two years in prison for being concerned in another misdemeanor.

THE WEST VIRGINIA BOARD OF PHARMACY will hold its annual meeting at Berkley Springs, West Virginia, on July 10. For further information address the secretary, Jno. G. McLain, Wheeling, or the president, O. P. Sydenstricker, Lewisburg.

#### Random Notes.

The mayor of Falkton, S. D., is a local apothecary named M. J. Marvin.

The drug store of H. P. Thompson was burglarized at Lisbon, Me., recently.

The St. Louis College of Pharmacy has for its president the mayor of the city—Mayor Walbridge.

Fire damaged a large block of houses at Greenfield, Ind., on May 25, among which was the store of C. T. Grove.

Burglars captured about \$1,000 in cash and merchandise from Leslie Williams' store at Clinton, Ia., not long since.

Chas. H. Griswold's store at Main and Trumbull streets, Hartford, Conn., was damaged to the extent of \$1,000 by fire.

A local branch of the Interstate League has been formed in Wheeling, W. Va. The officers are Joseph A. Bell, president; Wm. Hogue, secretary. The organization is based upon the old local association.

The Texas Drug Company of Dallas, has been organized with a capital of \$100,000. Incorporators: J. L. Lovejoy, W. J. Worsham, Yancy Bartholomew, Guy Sumpter, E. J. Fry, H. H. Adams, H. P. McKnight.

A rumor has been in circulation for some time to the effect that the Moffitt-West Drug Company and the Meyer Bros. Drug Company were about to consolidate, but members of both firms deny that they have any such intention.

The New England Drug Clerks' Exchange was tendered a dinner on May 22 at William O. Blanding's residence at Rumstick Neck. Mr. Blanding is president of the body, and invited a number of New England druggists to the dinner.

The bill providing that licenses of the sixth class shall be granted only to registered pharmacists having a certificate from the board of registration in pharmacy, has been adopted by both branches of the legislature of Massachusetts.

The St. Louis Drug Clerks' Society has elected the following officers for the ensuing year: President, S. E. Barber; first vice-president, George Waller, Jr.; second vice-president, Max J. Schneider; treasurer, Frank C. Garthoffner; secretary, Otto P. Mack.

The Foster-Milburn Company of Buffalo has been organized to manufacture proprietary medicines with a capital stock of \$150,000; and directors: Orren E. Foster, James Foster, Herbert J. Brain and Harry T. Vars of Buffalo, and Thomas Millburn, of Toronto.

A. Crescy Morrison of Milwaukee, Wis., who is well known in the wholesale and retail drug trade as chairman of the Committee on Fraternal Relations of the N. W. D. A., has an interesting article on the progress of road building in the June number of *Good Roads*. Mr. Morrison is an enthusiastic wheelman and is chief consul of the Wisconsin Division of the L. A. W.

The village of New London, Pa., has a sensation over the strange disappearance and absence of Samuel Martin, a young druggist and son of Ellwood Martin, of that place. He recently graduated as a pharmacist in Philadelphia. On April 25 he left his home with \$25 in his pocket for Harrisburg to appear before the State board of examiners. He took the cars at Kelson Station, on the Philadelphia and Baltimore Railroad, which point is the last tidings his people have of him. The State board writes that he never appeared before them, and though efforts have been made to locate him they have proved futile.

## Richmond Notes.

Mr. Christian is now with P. M. Slaughter, 25th and Venable.

Polk Miller, in his new profession, is meeting with merited success, as the crowded house testified on his appearance at the Richmond theater on the 80th ult.

The interior of W. H. Scott's store has been recently painted. And, by the way, this store probably fills more prescriptions than any other in Virginia. The file number is now 175,000.

The University College of Medicine, having met with so much success the first year, is obliged to add an addition to its buildings at 12th and Clay streets. This year all departments will be improved upon and at the beginning of the session on September 18, a finished course is promised.

**NEW JERSEY BOARD OF PHARMACY**—At the meeting in Camden, April 19, sixty-two (62) were registered on diploma, and fourteen examined. The following passed: Wm. F. Weber, Milville; Arthur S. Wilcox, Philadelphia, Pa.; Henry J. Fleischauer, Plainfield; Howard Baer, Salem; F. Wm. Speckman, Newark, and Owen F. Garrigan, Newark. At the meeting April 20 in Jersey City eight were registered and a class of 27 examined. Seven passed as follows: Leo Kaulfuss, Brooklyn; David Loesser, Newark; Benj. Bethel, Paterson; H. W. Rachel, New York City; Adolph G. Trenpel, Brooklyn; John G. Kimpel, Jersey City Heights, and C. D. Kay, Jersey City. At the Asbury Park meeting May 22d fourteen were registered on diploma.

**FLORIDA ASSOCIATION.**—At the last meeting Tallahassee was chosen as the place for the next annual meeting, and the officers elected for the ensuing year were: F. P. McElroy of Dade City, president; S. B. Leonardi of Tampa, first vice-president; J. M. Dixon of Titusville, second vice-president; E. Berger of Tampa, third vice-president; R. J. Martinez of Jacksonville, secretary, and Thos. Clarke of Jacksonville, treasurer.

## Trade Notes.

Sticky fly-paper is in order now, and "Tanglefoot" is a popular brand. See the advertisement on pink page for prices.

The Albany College of Pharmacy have an announcement in this issue which should be read by every intending student of pharmacy in the State of New York. The annual catalogue containing full particulars regarding fees, etc., can be had on application to A. B. Husted, M.D., secretary, 144 State street, Albany.

The attention of our readers is directed to the announcement of the Philadelphia College of Pharmacy which appears in this issue. The next term of the college begins October 1, and those who contemplate matriculating will do well to write at once for a catalogue. Address the actuary of the college, Thos. S. Wiegand, 145 N. 10th street.

It will be to the advantage of every one interested to write to Chas. R. Doane, 22 Meserole street, Brooklyn, for price lists and samples of the Seidlitz powders put up by the Doane Seidlitz Powder Machine. The powders are composed of the purest chemicals and are accurate in weight and warranted. Large hospitals like the Roosevelt and Presbyterian invariably use the Doane Seidlitz Powder, as they are aware of their reliability and medicinal value.

The Joel A. Connolly Plaster Co. of

Boston, Mass., are introducing a profitable and worthy specialty in medicated plasters. This is Connolly's croton oil plaster, an article which is being extensively recommended by physicians as an effective counter irritant and for the cure of bronchial troubles, incipient sore throats, and laryngeal affections, as well as the numerous other maladies amenable to treatment by medicated plasters. To introduce the plaster the Joel A. Connolly Plaster Co. offer to send samples free to druggists. Write your request on a postal card and mention THE AMERICAN DRUGGIST.

The College of Pharmacy of the City of New York is now ensconced in its new building on West 68th street, where unusual facilities have been provided for imparting a knowledge of pharmacy and the allied sciences to students. It may safely be said that the New York College of Pharmacy is unsurpassed by any similar institution in teaching facilities and all that goes to provide the pharmaceutical student with a thorough knowledge of his profession. As the session of '94-'95 promises to be unusually well attended, it is advisable for intending students to make application for seats without delay. Full information regarding matriculation and lecture fees can be had upon application to the secretary, J. Niven Hegeman, 115-119 West 68th street.

## A Profitable Line for Druggists.

It is not generally known among the trade that a large business is done by some druggists in selling old postage stamps to collectors. We know of many firms doing a flourishing business in this line, selling large quantities of stamps to collectors each month.

The Standard Stamp Co., No. 4 Nicholson place, St. Louis, Mo., sends out consignments of stamps to reliable druggists in every city of the United States, and it would pay any who have good stands, especially near a school or college, to handle these goods. There is no expense in giving this a trial as the firm, sends out these consignments on liberal commissions.

## A Famous Steamboat Line.

The Providence Line between New York and Boston, Providence, Worcester and all Eastern Points is again open for business, having resumed its passenger service for season of 1894 on June the 4th from its magnificent new pier No. 36, North River, one block above Canal street and 3 blocks above Desbrosses street ferry. New Pier 36 is one of the handsomest piers in the city, having been greatly enlarged and improved during the past winter to accommodate the Providence Line. It has a two-story front on the street 229 feet long and the length of the pier is 793 feet.

The Providence Line is one of the oldest and most famous of Sound Lines. Its route combines the longest water trip and the shortest rail ride, insuring full night's rest with early arrival at destination. Its steamers, "Connecticut" and "Massachusetts," are among the handsomest vessels afloat. In beauty and convenience of appointments they are unsurpassed. A first class orchestra gives concerts in the grand saloon during the trip and the dining room of these steamers on the main deck with windows open to the outer air insure a delightful cool and airy meal, which the experience of travelers has taught them is almost invariably perfectly cooked and served. These steamers leave New Pier 36, North River, at 5.30 P.M. daily except Sunday.

## Review of the Wholesale Market.

NEW YORK, June 13, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The progress of the month brings no improvement in the outlet for goods in any of the various departments, the movement of stock being reported as considerably below the average of previous years for this season. The absence of important demand does not, however, cause any freer offerings or suggest any material price concessions, though buyers may be said to have the advantage when desirous of making stock additions. The opium market is in a demoralized condition, and quotations for the time are nominal. Ergot is weak and lower owing to competition. Ipecac is easier. Salicylate of soda has declined. Jalap is firmer. Norwegian cod liver oil is strengthening at primary sources, though nominally unchanged in this market. Manaca root has advanced.

ADVANCED.	DECLINED.
Ammonium carbonate (American).	Opium
Sal ammoniac.	Trieste cuttle bone.
Divi divi.	Oil lemon.
Gum kino.	American saffron.
Quince seed.	Flake naphthaline.
Manaca root.	Celery seed.
	Potassium chlorate.
	Sodium salicylate.

ALCOHOL is maintained by the Trust managers at \$2.18 @ \$2.22 less the usual rebate. Competition from outside sources appears to be inconsequential, and the bulk of business is yet controlled by the Trust.

BALSAM COPAIBA has been inquired for, and among other transactions we note sales of 5 bbls. Para at a trifle below 35c.

BALSAM FIR, Canada, is sought for only in limited quantities, and values are merely nominal, with no special variation from recent quotations. New crop to arrive is offering at \$2.25. We quote the range at \$2.75 @ \$2.80.

BALSAM PERU continues quiet, but prices are maintained with a fair show of firmness at the range of \$1.85 @ \$1.95.

BARKS.—Buckthorn is jobbing fairly within the range of 7 @ 8c. Sassafras finds steady sale at the previous prices. Soap finds a steady consuming outlet at the former range of 3 1/4 @ 4c.

BUCHU LEAVES, short, are finding sale in small lots at 8 @ 9c. for common to ordinary, and 12 @ 14c. for prime to choice green.

CACAO BUTTER is easier and we are reported sales of some 2,000 lbs., foreign bulk, at 31 1/2c.

CASTOR OIL develops no new feature of interest and the market is dull, purchases being made only as immediate want suggest. The nominal prices are 14 1/4 @ 15c. for bbls. and 15 @ 15 1/2c. for cases.

COD LIVER OIL Norwegian, is slightly firmer at primary sources, and the holders here refuse to shade \$26. The impression is gaining ground in the trade that higher prices will prevail in the fall, the short crop and inferior qualities of the oil this season being referred to as furnishing grounds for this belief.

CUBEB BERRIES are in fair jobbing request at the current range of 16 @ 20c. for XX and 14 @ 15c. for ordinary. Powdered is held at 20 @ 30c.

CUTTLE BONE, Trieste, owing to active competition, has declined to the point of 8 1/2 @ 8 3/4c., which is stated to be below the cost to import, and the lowest price yet reached in the history of the trade. Higher prices are probable later on.

DAMIANA LEAVES are offered freely within the range of 13 @ 14c. and we are reported sales of some 500 lbs. at the inside figure.

ERGOT continues very dull. German (Russian) is easier with 21 @ 23c. quoted; the outside figure for desirable grades. Spanish is steady at 25 @ 27c.

GUARANA is freely inquired for, but buyers' ideas are yet below the level of holders and the distribution is restricted; in consequence, we quote the range at 90c. @ \$1.

LYCOPodium is not meeting with the usual inquiry of the season, and values are maintained at the previous range of 53 @ 56c.

MANNA, small flake, is tending higher in sympathy with prices at primary sources; 31c. is now an inside price, and at this figure only limited quantities can be obtained.

MENTHOL is scarce, and \$5 is the lowest open quotation; Cocking's is held at \$5.25.

OPium is tending steadily downward, and the market is dull and depressed with every indication pointing to lower prices as the season advances. Referring to the situation in Smyrna the correspondent of the *London Chemist and Druggist* at that point expresses the opinion that the next crop will be one of great abundance, and says he looks for a total output of 8,000 cases if the weather continues favorable. The conclusion to be drawn from this is a summer of low prices for opium and its derivatives. In this market buyers are pursuing the policy of covering immediate wants only. Single cases are quoted \$1.90, and sales have been made at even a lower range. Jobbing parcels are offered at \$1.95 @ \$2, and powdered is quoted \$2.80 @ \$2.85.

QUININE remains quiet but firm with no special variation from previous prices. Foreign brands from outside hands are held at 22½ @ 23½c. as to brand and quantity. Manufacturers continue to maintain their contract price of 25c.

SAFFRON, American (Mexican), continues weak and unsettled, with 30c. quoted nominal for sales; new crop for June shipment is offered at 20c.

SENNA, Alexandria, continues in good jobbing demand; sales are reported of 2,800 lbs. garbled and sifted, but the price was not disclosed.

TONKA BEANS, Angostura, are jobbing fairly within the range of \$2 @ \$2.15 according to quantity and quality.

#### ESSENTIAL OILS.

ANISE continues to offer in limited quantities at \$1.50 @ \$1.55 though some holders are quoting \$1.60 and even higher.

BAY is jobbing slowly within the range of \$3.50 @ \$4. A communication bearing upon the U. S. P. requirements for this oil with reference to the statements of some New York essential oil dealers will be found elsewhere in this issue. The article emanates from the well-known firm of Fritzsche Bros. and should command the careful attention of all in the trade.

CITRONELLA is jobbing quite freely with native quoted 25 @ 28c.

CLOVE is dull and the market retains an easy appearance upon the basis of 50 @ 53c.

LEMON is seeking sale at \$1.10 @ \$1.20 for strictly prime brands; good ordinary quality is offered at 90c. to \$1, and inferior grades down to 80c.

PENNYROYAL is somewhat neglected, though with the small receipts the market is maintained at \$1.10 @ \$1.20.

PEPPERMINT, HGH, offers in a limited way at \$2.85, but \$3 is quoted regular. Bulk is held at \$2.30 @ \$2.60 as to quality.

WINTERGREEN is quiet, but there is no urgency to realize at \$1.40 @ \$1.50.

#### DYESTUFFS.

CUTCH is without change either as regards demand or prices. Small sales are reported at 5½ @ 6c. for prime quality bales, 6 @ 6½c. for block and 8½ @ 9c. for MN slab.

DIVI DIVI has undergone a material advance owing to scarcity; we quote the range at \$70 @ \$75.

GAMBIER remains quiet and without important changes. From wharf 3½c. is generally asked; steamer and sail goods ex-store are held at 4 @ 4½c.

MADDER remains quiet but firm, with the supplies light.

NUTGALLS, Blue Aleppo, are quoted at the range of 13 @ 14c. as to quantity.

SUMAC, Sicily, is easier with \$67.50 @ \$70 now quoted as to brand and quantity.

#### CHEMICALS.

ACETATE OF LIME, Gray, is in exceptionally good demand and manufacturers are reported unable to fill orders on hand, being in many instances over sold.

ALUM is held steadily and a fair distributive movement is reported; lump realizes \$1.75 and ground \$1.80 @ \$1.85.

AMMONIUM CARBONATE, Domestic is in very light supply and values are hardening with 8½c. quoted inside.

ARSENIC, White, continues in fair steady inquiry, with the current sales at the range of 3½ @ 3¾c. as to brand.

BLEACHING POWDER does not improve either as regards price or demand. Sales of some 50 casks are reported at \$2.20.

BLUE VITRIOL is firm at 3¼ @ 4c. with a moderate trade reported at this range.

CARBOLIC ACID continues dull and inquiry is limited to small jobbing lots. Crystals in drums are quoted 12½ @ 13c. and bottles 19 @ 21c.

CHLORATE OF POTASH is easier and sales of German have recently been made down to 33½c. though the nominal quotation remains 13½c. English is held at nominally 13¾c. for crystals and 14c. for powdered.

CREAM TARTAR continues in steady fair request with makers quoting the uniform rate of 17 @ 17½c. for crystals and 17½ @ 18c. for powdered.

NITRATE OF SODA is in moderate demand and the market is steady at \$2.25 @ \$2.30.

OXALIC ACID remains quiet at 6¼ @ 6½c. for German as to quantity.

QUICKSILVER meets with fair attention and the market is well sustained at the range of 49 @ 50c. as to quantity.

SAL AMMONIAC, German, white grain, is advancing at primary sources, the import cost now being reported as the equivalent of 7½c. Purchases here can be made at 6½ @ 7c., though an advance is looked for.

SODIUM SALICYLATE has been reduced 10c. per lb., the quotation for bulk now being \$1.10 @ \$1.15.

TARTARIC ACID continues to find moderate inquiry at the previous range with numerous jobbing sales at 21½c. for crystals and 22 @ 22½c. for powdered as to quality and quantity.

#### GUMS.

ALOES, Curacao, have been inquired for to some extent of late, but there is no stock in first hands and jobbers require 3 @ 3½c. which is slightly above the idea of buyers, who bid 2½c.

ASAETIDA is in better supply and the market has declined a trifle in consequence, 22½c. being now quoted as acceptable for prime grades.

ARABIC, sorts, are in better demand and the tone of the market is stronger, 10½ @ 11c. being generally required.

CAMPOR, Japanese, has sold freely in the interval at full 40c. The stock is narrowing down to close limits without, however, causing any appreciation in values. Forward delivery goods, it is said, can be purchased at materially lower figures.

CHICLE is held with increased firmness though no further change in prices is reported. We quote the range at 26 to 27c.

GAMBOGE, gedda, gualac, mastic, myrrh and olibadanum are all quiet though without quotable change in value.

KINO has further advanced the principal holders now requiring \$1.40 for limited quantities.

SENEGAL continues quite but values are well sustained upon the basis of 9 @ 9½c. for sorts and 12 @ 45c. for picked.

SHELLAC continues very dull and prices are nominally unchanged.

TRAGACANTH is without important change. The market is very dull and prices rather favor buyers.

#### ROOTS.

ACONITE is finding sale in a jobbing way upon the basis of 11½ @ 12c.

ALKANET is held at 6¼ @ 7c. with small sales within the range.

DANDELION, German, meets with about the usual inquiry, and we are reported sales of some 1,000 lbs. at 7½c.

GOLDEN SEAL continues very slow of sale and some holders are showing a disposition to realize at a concession. The general asking price is 20½ @ 21c. though bids of 20c. and possibly a fraction less would be entertained if firmly pressed.

BLACK COHOSH is in steady moderate request and among other transactions we notice sales of 500 lbs. at 3½c.

IPERCAC continues held at \$1.10 @ \$1.20 as to quality.

JALAP is meeting with more inquiry, but buyers' ideas are still below those of holders, the former offering 16 @ 17c. and the latter quoting 19 @ 20c.

MANACA ROOT is very scarce, and for the small quantity in stock \$1.50 is asked.

RHUBARB has been inquired for to a moderate extent during the interval and prices are fairly well sustained at previous range of, say, 20 @ 25c. Of medium grade root we are reported a sale of 2,500 lbs. at 25c.

SARSAPARILLA, Mexican, is in demand and scarce with 9½c. quoted firm. Honduras has sold to the extent of some 32 bales on private terms.

SENEGA is quiet, but prices are without quotable change; holders ask 38½ @ 40c.

#### SEEDS.

ANISE, Italian, is finding sale in a small way at 8½ @ 10c.

CANARY continues quiet without, however, any quotable change in price.

CELERY is meeting with more inquiry, and we are reported a sale of 10 bags at 15c. Holders are indifferent sellers in the anticipation of an early appreciation in values.

CORIANDER is quiet, small parcels finding sale at the quoted range of 8¼ @ 9c. Sales of Mogador to the extent of 500 lbs. to arrive at 8c. are reported.

MUSTARD is quiet though without special change in price. California yellow held at 3½c. and brown 3½ @ 3¾c.

QUINCE is scarce and held at 40c. for German; cleaned Russian 35c. and natural Russian 35c. and 25c. During the week sales have been made of some 500 lbs. of German and cleaned at 35c.

# American Druggist and Pharmaceutical Record.

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**ELECTROLYTIC** production of the chlorates formed the subject of an interesting paper in a recent issue by HENRY BLUMENBERG in which he describes a process invented and patented by himself. A practical test of the process on a large scale is about to be undertaken and the results will be awaited with much interest in the chemical world.

THE metal bismuth and its salts have recently undergone material reductions in price and the circumstance has served to direct attention to the syndicate which has for a number of years controlled the production of the metal. The *Chemist*

and *Druggist* refers to the syndicate as a "little handful of firms" who have "unostentatiously but contentedly" batted upon the consumers of the drug. The bismuth trust have undoubtedly had things very much their own way from the start. The price of the metal has been elevated to the highest possible notch and manufacturing chemists could do nothing but submit to its (the trust's) exactions.

The present decline in prices is said to be due to certain disagreements between individual firms of the syndicate. But it is at the same time known that a good deal of bismuth is being turned out by independent producers, and it is not unlikely that bismuth preparations will reach a still lower range in the near future.

## THE SARATOGA MEETING.

THIS year's meeting of the New York State Pharmaceutical Association promises to be more than usually interesting. Secretary HOLMES has just issued the official programme, from which we gather that several new features of interest are promised; chief among these being a visit to the "House of Panza," where the members will be treated by FRANKLIN W. SMITH to a descriptive lecture on the house and its antiquities. This structure is better known as the Pompeian house and is a reproduction of the celebrated House of Panza, destroyed at Pompeii in A.D. 79. Many students of history and archaeology have at different times evinced interest in this reproduction of the House of Panza and it should afford rare material for a lecture. The members will assemble at this famous memento of Pompeii at 8 o'clock Tuesday evening, the twenty-sixth.

The second day's proceedings will commence with a carriage ride to Woodlawn Park—a park reputed to have twice the area of Central Park in New York City and to be the largest private park in America; it is greatly celebrated for its fine park roads and beautiful vistas of forest and lawns; on this occasion the destination of the party will be the famous "Spouting Springs." An important part of the programme for the second day's proceedings will be a lecture on the "Rubber Industry of South America," by Prof. H. H. Rusby of the New York College of Pharmacy. The excursion on Saratoga Lake to White Sulphur Spring is promised for

the forenoon of Thursday. A light collation will be served on the boat and the outing is sure to be an enjoyable one. Besides the lectures mentioned a number of interesting papers are promised and several New York members will take prominent part.

Members residing in New York City who are thinking of attending the annual meeting should signify their intentions at once. This can be done by dropping a note to the editor of this journal, who is already in communication with a number of gentlemen who have arranged to go by water to Albany and thence to Saratoga by rail.

## PHYSICIANS DISPENSING.

TO find the druggists' side of the case in the dispensing of medicines by physicians presented fairly by any journal not especially connected with the drug business is so unusual as to warrant special comment, and we therefore reproduce the following from the columns of the Washington, D. C., *Progress*:

Many of our druggists complain bitterly of an abuse that is assuming wide proportions. The big drug manufacturers of New York and Philadelphia are putting up standard prescriptions in solid tablet form, which they drum energetically among the physicians. The medicines in this form can be conveniently carried by any physician on his round of visits in large quantities or kept in stock in their offices.

Then, instead of writing a prescription, the doctors fill a little vial with tablets, cork and label it, and give it to the patient at a cost of from one to three dollars. When the bottle is empty the patient is forced to return to the doctor's for a new installment, which is only too often the same thing passed off as a new compound and charged for as a new prescription.

The evils of this abuse lie in the fact that the reliable druggist would sell the patient exactly the same thing for a quarter for which the physician charges two dollars, thus imposing upon the public and depriving the druggist of his small profit on the prescription.

Again the community suffers in that these physicians buy entirely of out-of-town wholesalers, at wholesale rates, thus sending money to other cities which would otherwise be circulated to the benefit of local trade.

Can any one fail to see the unfairness of this treatment? Yet the druggist has no protection, or even retaliation. In fact, as a rule, he is afraid to complain openly, because the doctors whom he would condemn are the men who could ruin his trade by dictating to their patients to purchase their prescriptions at another store, thus boycotting him who lifted up his voice in upbraiding.

While the subject is treated from the purely commercial point of view that side of the subject is forcibly presented and may furnish suggestions to our readers.

## West India Lime.

Lime juice is obtained by compressing the fresh ripe fruits between heavy rollers. This is exported in the raw state or concentrated. The latter is obtained by evaporating the raw juice in copper or enameled iron pans until it is reduced to about one eighth or one-tenth of the original bulk. When exported it is a dark, viscid fluid of the consistence of treacle. The concentrated lime juice is not used for food purposes, but devoted entirely to the preparation of citric acid, largely in demand by calico printers. From the rind of the fresh fruits there is obtained by a hand process, called "ecuellling," a fine essence of limes exported in copper vessels. A description, with an account of the mode of using the *ecuelle* (a specimen of which was presented to Kew by Mr. Joseph Sturge, managing director of the Montserrat Company in 1892), is given in the *Kew Bulletin*, 1892, pp. 107, 108. The *ecuelle* is a copper basin furnished on the inside with numerous prominent studs. The instrument is held in the left hand while the fruit, taken singly, is gently rubbed with a circular motion on the studs. This action bruises the oil glands in the rind and the oil flows in small quantities to the bottom of the basin. The process is a slow one and is performed in the West Indies by women and girls. The task per day is measured in fluid ounces. By distilling the raw lime juice a spirit is obtained known as oil of limes. The essence of lime extracted by hand is far more valuable than the oil of limes. The perfume of the latter is injuriously affected by the heat necessary in distillation.

A recent and somewhat full account of the lime industry at Montserrat and Dominica is given by Mr. Consul Galbraith in the United States Consular Reports, December, 1892, pp. 519-522. As these reports are not easily accessible in this country, the following brief summary is given on points not already touched upon: The area under lime cultivation at Montserrat in 1892 is estimated at "1 200 acres, of which about 900 acres are in fruit-bearing trees." The orchards in Dominica are smaller, and with one or two exceptions, the same care is not exercised in the cultivation of the trees, nor in the manufacture of the juice. "The largest crops are gathered in years in which the rainfall is heaviest. The average yield of fruit from an orchard in full bearing would be about 60 to 80 barrels (an ordinary flour barrel is employed in all orchards to gauge the quantity of fruit) from an acre per annum. . . . A barrel of fruit will yield from six to seven gallons of juice, and each gallon of sound ripe juice contains from 12 to 15 ounces of citric acid." Raw lime juice is preserved in casks and shipped chiefly to the London market. The manufacture of concentrated lime juice consists in boiling the juice in open pans until reduced to about one-tenth of its volume; "it is then a black, viscid fluid containing from 80 to 100 ounces of citric acid per gallon. Concentrated lime juice is principally shipped to the New York market."

Green limes are exported to a small extent only, and to the English market. Pickled limes, in salt water or brine, are invariably sent to Boston. "The average shipments of products of the lime tree from Montserrat for the last five years were as follows: Raw lime juice, 800 puncheons of 120 gallons each; concentrated lime juice, 200 casks of 54 gallons each; green limes, 1,000 boxes; pickled limes, 300 barrels; essential oil, 2,500 pounds."—*Kew Bulletin*.

## Pharmaceutical Education.\*

By JAMES KENNEDY, Ph.G., M.D.,

Professor of Pharmacy and Dean of the Faculty of the School of Pharmacy of the University of Texas.

The practice of pharmacy has ever been closely linked with medicine and from the very nature of things must continue to be. In fact the existence of pharmacy as a separate profession dates from a comparatively recent period, whereas the art of medicine is as old as the world.

In ancient times when the art of medicine was veiled with superstition the physicians prepared their own medicines and consequently the pharmacist proper had no existence in those days.

To-day, however, the art of medicine rests upon the secure foundations which have been built for her from the truths of Science. She no longer depends upon the flimsy superstitions of past ages, nor does she accept the traditional inheritance of the healing guild without first subjecting them to the crucial tests imposed by the laboratories of Science. The labors of the anatomist, the physiologist, the experimental therapist, and last, but by no means least, the pharmaceutical chemist have all contributed towards formulating a rational system of medicine and eliminating the disgusting remedies of the dark ages of medical practice. Instead of using such potent medicaments as the liver of a fat dog, the dried faces from the same animal, body vermin, snake flesh and skins, human fat and the like, to-day, we are using remedial agents, the chemical and therapeutic properties of which have been determined by scientific investigation. We no longer compel our patients to swallow boluses and drafts of filth anointed with superstition, whose degree of potency depends upon the performance of cabalistic or religious rites, but instead we administer to them elegant and palatable remedies which are furnished us by the pharmacist's subtle art.

In order to be successful in the practice of pharmacy to-day, one must not only be well versed in both ancient and modern lore of pharmacy, chemistry, materia medica and botany, but must know the market quotations on asafoetida and alcohol, quinine and castor oil, baking powder and calomel, opium salts and camoils skins, rhubarb and rhigolene, bi-sulphide of carbon and oil of cologne, and countless thousands of other heterogeneous things. He must know how to differentiate a Cuban from a domestic cigar, be able to distinguish a Japanese from an American, French or English toothbrush, in short he must have the names, buying and selling prices of all known drugs, chemicals, patent medicines, toilet articles and a thousand other unclassifiable commodities ever at his finger and tongue's end and among the personal attributes which a druggist is supposed by an over fastidious public to possess is the appearance of a Beau Brummel, the manners of a Chesterfield, the patience of a Job and the piety of a parson.

It must be evident to you, gentlemen, that no training school can meet all of the requirements which seem to be at the present demanded in the practice of pharmacy nor is it at all likely that such an institution will ever be able to meet the demands until a separation of the mercantile features from pure pharmacy has been effected. I predict that such a separation will occur in the near future—indica-

tions seem to point that way. I believe that those who desire to follow pharmacy as a profession will outlive their more sordid brethren who follow pharmacy as a trade and force them into purely mercantile lines. Holding as we do these views we have deemed it proper to eliminate from our discussion the mercantile features of pharmacy. The colleges of pharmacy have been doing noble work, and the people are now educated up to the point of appreciation and insist that their prescriptions be compounded and dispensed by a graduate of pharmacy.

The great work of pharmaceutical education was first begun in this country in 1821, when the College of Apothecaries was organized. This institution was incorporated in the following year under the name of The Philadelphia College of Pharmacy, which is the oldest college of pharmacy in the United States, then followed New York City, Baltimore, Chicago, St. Louis, Ann Arbor and Boston. The foregoing institutions were organized between 1823 and 1867. The character of the work done by these schools was evidently appreciated and their claims to an existence established, for their success has continued unabatingly and has stimulated the organization of other colleges of pharmacy, so that at the present time we have more than forty institutions teaching the disciples of Galen the mysteries of his art.

Among the pioneers in the teaching of pharmacy may be found the illustrious names of Parrish, Maisch, Bridges, Bedford, Markoe, Scheffer, Diehl and Procter. Their labors have borne fruit, the seed which they sowed has passed through the transitional stages of unfolding and blossoming, and has matured and ripened into a beneficent blessing to mankind.

The first question with which we have to deal in pharmaceutical education is the preliminary training of the student. It must be obvious that unless he has already acquired a fair elementary education it will not be possible to teach him the various branches of science which go to make up a pharmaceutical education. If he is unfamiliar with the science of etymology, and a stranger to orthography, it is not at all likely that he will be able to make satisfactory progress in the study of either chemistry, physics, materia medica or botany.

Unless he possesses some knowledge of arithmetic he will not be able to understand those truths of chemical science represented by the terms atomicity, valence, etc., and consequently will fail to master it. To say nothing of his being unable to calculate the percentage, strength of solutions of medicinal substances, or the amount of active ingredient contained in each dose of a given prescription—calculations that the practical pharmacist is called upon to make many times daily.

It is clear then that the student of pharmacy must possess a good common school education, and by this we mean that he must be able to read, write and spell correctly; he must be familiar with elementary arithmetic, possess a fair knowledge of geography and the rules of grammar.

### Rapid and Perfect Staining of Gonococci.

Lanz suggests, in the *Apotheker Zeitung*, the following method, which the editor of the *National Druggist* can recommend from personal experience:

The secretion is spread on the cover-glass and fixed by heat in the ordinary way, only care should be taken not to

\* From a paper read at the annual meeting of the Texas Pharmaceutical Association and communicated by the author.



overheat. It is then placed in a 20 per cent. aqueous solution of trichloroacetic acid, and left there from 30 seconds to one minute. The secretion takes on, almost immediately, a white appearance. It is then slightly rinsed with clear water and the superfluous moisture removed by the aid of bibulous paper. The cover-glass is again passed through the flame two or three times to fix the secretion, and it is then floated, charged surface downward, on a methyl-blue solution, prepared as follows:

In a capacious test tube mix 80 cubic centimeters of distilled water and 1 or 2 drops of liquor potassæ, and add saturated alcoholic solution of methyl-blue until the mixture assumes a dark blue color.

Leave the cover-glass in contact with this solution from 2 to 5 minutes (the reaction rarely requires the latter length of time.—*Ed. Nat. Drug.*), remove, rinse well and let dry. The preparation may be mounted in balsam or dammar, or it may be examined at once in glycerin.

In this mode of preparation the cocci do not appear so large as when the older process is used, but their contours are far more neatly and sharply brought out, the cocci appearing deep blue, while the cellular material shows up much lighter, and of a matt or cloudy color. If desired, eosin may be used as a contrast color, but care must be taken to use it sufficiently diluted. Thus double-stained, the gonococci remain deep blue, but the cellular elements take on a rosy hue.

Very fine effects are produced by placing the cover-glass, after staining with methyl blue, as directed, and rinsing in a weak aqueous solution of Bismarck brown, and leaving it in contact from 15 to 30 seconds. On examination, after rinsing, etc., the cellular protoplasm will show up greenish brown, the nuclei the same color but more pronounced, while the gonococci will remain dark blue, or, if left long in the dark brown solution, a dark blue-brown. The gonococci stand forth remarkably sharp and distinct in the latter case, and with good objectives have almost a stereoscopic distinctness.

After trying all other processes, the editor of the *National Druggist* gives the last one the preference.

### Balsam Copaiba Tests.

The following important circular on balsam copaiba has been issued by Stallman & Fulton of this city, who invite the co-operation of the trade in the matter discussed:

The arrivals of this article, from direct sources, during the year 1891 amounted to 25,480 pounds; in 1892, 185,280; in 1893, 80,000, and the first four months of 1894 about 27,000.

The consumption has not materially decreased, yet in spite of the greatly diminished imports the price has not advanced. The cause of this is not far to seek, and we call attention to the fact that hardly any balsam copaiba goes out now into the trade unadulterated, even from some of the most reputable houses, while it is claimed to be pure. These adulterations have of late grown to such an extent that it is time to call a halt; buyers should not only buy of strictly reliable houses, but examine and test every package they receive.

The principal adulterant is gurgun balsam (E. I. Wood Oil), which has been imported here of late from England to an alarming extent. Among other adulterants are mineral oil, castor oil, etc. Gurgun balsam can readily be detected by holding the suspected sample in the sun or a strong light; the presence of gurgun balsam is indicated by a greenish violet tinge.

Hager's test is as follows: To 2 cc. of a mixture of 1 part pure sulphuric acid and 25 parts pure acetic ether add 4 drops of the balsam to be tested; after a few minutes the mixture will assume a violet hue, if a large percentage of gurgun balsam be present, and on standing for about 12 hours will change to a dark brown to black color; in small admixtures of gurgun the violet tinge will not be pronounced, but on standing for above named length of time will also partake of a dark brown color.

Paraffine oil, liquid paraffine or vaseline oil can be detected by the following test, devised by the L. d'ou Chemical Laboratory of New York, viz.: Put 30 drops of the balsam in a test tube, adding 3 to 4 times their volume of 95 per cent. alcohol, shake well together, then hold the tube suspended in boiling water until the contents begin to boil; if paraffine oil is present it will appear separated from the mixture at the bottom of the vial, the balsam being held in a clear or milky solution by the alcohol.

Pure balsam copaiba of all varieties excepting Para, mixed with an equal volume of aqua ammonia, will make a clear transparent solution and will more readily do so when heated; if gurgun balsam, Venice turpentine or castor oil is present in the copaiba, the mixture, after standing for, say, 12 hours, will remain either wholly or partly cloudy. It is necessary to take ammonia water, the same results not being obtained with stronger ammonia. Owing to the large percentage of oil copaiba which is present in Para balsam, the above test is not applicable to this grade. We believe other tests can be devised, and we invite further investigation. Considerable quantities of balsam copaiba, especially the Para kind, have frequently been deprived of most of the oil of copaiba by distillation and put on the market again as pure balsam, but really defective in quality.

### Toothache Cures.

Main Nichol, in a communication to the *Dental Record*, advocates some new remedies for the various forms of toothache. The dull, constant aching due to periosteal inflammation is, he thinks, more effectually relieved by means of a comparatively fresh aconite leaf than by the tincture of aconite, the former having greater strength and more persistent action. The gum over the inflamed root being dried, a piece of the leaf of suitable size is cut, and this is simply pressed into place, where, as a rule, it may remain as long as a capsicum plaster. Leaves may be kept moist in a tin box with a tight fitting lid, in the interior of which is a damp sponge. In pyorrhœa alveolaris a common symptom is an intense itching, almost akin to pain and perhaps more intolerable, provoking a constant desire to rub the gums. This pruritis readily disappears with the employment of a solution of one of the essential oils—notably peppermint—used as a mouth wash or tooth-brush tincture. Where pulps are acutely inflamed Mr. Nichol advocates the heroic treatment of drilling into them with the dental engine, and maintains that the relief obtained more than compensates for the pain of the operation.—*Chemist and Druggist*.

### Queries and Answers.

We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.

When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.

**Prescription Incompatibility.**—J. U. B. writes, "Some days ago I compounded the following:

Bismuth subnit. .... 3 vi  
Acid carbolic. .... gttss. lx  
Listerin. .... 3 ij  
Cordial q. s. .... 3 viii

"I compounded this and after shaking thoroughly I uncorked the bottle to allow the accumulated gas to escape, corked it again and set it aside for some time. Upon handling the bottle there was an explosion sufficient to blow the cork some distance away.

"The cordial contains soda bicarb. and the conclusion I came to was that chemical

decomposition ensued between the bismuth subnit. and the sodium bicarbonate. Was bismuth oxide formed?"

No. The trouble in this case is due in all probability to a reaction between the acids contained in the listerin (boric and benzoic) and the sodium bicarbonate of the cordial. Alkaline carbonates are sometimes subject to decomposition in the presence of bismuth subnitrate, especially when the bismuth salt has been improperly washed and contains traces of free acid, but the result is not the formation of an oxide of bismuth. The reaction is probably at an end with the consumption of the free acid.

**Dr. Miles' Cure.**—G. E. G. requests information concerning the composition of "Dr. Miles' new cure for the heart."

We have no information concerning this article. Perhaps some one or more of our readers will be able to communicate a note on the subject.

**Attfield's Chemistry.** H. S.—A new American edition of this manual is promised shortly by the publishers, Lea Brothers, Philadelphia.

**Aromatic Vinegar.** F. H.—A great variety of formulas for acid acetic aromatic are in use. We cull the following from our note-book.

#### I.

Oil of mace.....	3 drams
Oil of rosemary.....	3 drams
Oil of lavender (English).....	6 drams
Camphor.....	4 ounces
Glacial acetic acid.....	2 pints

#### Mix.

Mallard's toilet vinegar is said to have the following composition:

#### II.

Oil of lavender.....	22	30 minims
Oil of rosemary.....	22	30 minims
Tincture of musk.....	22	30 minims
Oil of neroli.....	25	minims
Oil of lemon.....	3	drams
Oil of bergamot.....	3	drams
Oil of orange peel.....	4	drams
Tincture of benzoin.....	12	drams
Tincture of tolu.....	12	drams
Glacial acetic acid.....	24	ounces
Alcohol.....	4	pints

#### Mix.

#### III.

Oil of citron.....	1	dram
Oil of cloves.....	1	dram
Oil of bergamot.....	10	drops
Oil of cinnamon.....	10	drops
Oil of thyme.....	20	drops
Oil of lavender.....	40	drops
Glacial acetic acid.....	8	fl. ounces

#### Mix.

**Combined Toning and Fixing-bath.** J. M.—The following will be found useful:

Soda hyposulphite.....	8 1/2	ounces
Citric acid.....	2	drams
Lead acetate.....	3	drams
Ammonia sulphocyanide.....	7	drams
Alum.....	2	drams
Gold chloride.....	15	grains
Water.....	14	ounces

#### Mix.

**Cod Liver Oil and Malt Extract.** A. E. A. B.—There is a good formula for the above in the *National Formulary*. Another formula of recent construction reads as follows:

Cod liver oil.....	150	parts
Water.....	50	parts
Scale pancreatin (soluble).....	1	part
Sodium chloride.....	2	parts
Sodium bicarbonate.....	2	parts

Dissolve the pancreatin along with the salines in the water, digest at a temperature of about 90° F. for three hours, stirring occasionally. Put 200 parts of any good commercial extract of malt in a mortar, add the pancreatized oil gradually, and flavor with oil of pimento, quantity sufficient.

## Quiz Box.

*This series of questions will be continued each week. The answers to each series of questions will appear in their issue for the fourth week following their publication. All of our readers are invited to compete for the prizes named below.*

*Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published each week.*

*Address Editor Quiz Box, 37 College place, New York.*

**FIRST PRIZE.**—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from March 22 to June 28, 1894.

**SECOND PRIZE.**—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

**THIRD PRIZE.**—A copy of Heebner's Manual of Pharmacy and Pharmaceutical Chemistry will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

**FOURTH PRIZE.**—A copy of Lloyd's "Elisirs" will be awarded to every person who sends in an answer to every one of the questions published in the series, making an average of 66 per cent.

### Answers to Questions; Eleventh Series.

121. The change in volume of a gas, produced by a given change of temperature, is called the coefficient of expansion and is generally expressed as a fraction of the original volume. When using centigrade degrees the coefficient of expansion is  $\frac{1}{273}$ , that is (starting from zero) every change of  $1^\circ$  in temperature, above or below  $0^\circ$ , produces a change of  $\frac{1}{273}$  of the original volume. For Fahrenheit degrees it is  $\frac{1}{273} \times \frac{5}{9}$  or  $\frac{5}{2439}$ .  $100^\circ$  change is an increase of  $\frac{100}{273}$  in volume or 273 liters +  $(\frac{100}{273} \times 273) = 372$  liters, the space 273 liters of oxygen will occupy when heated from  $0^\circ$  to  $100^\circ$ , if the pressure remain uniform.

122. There are two forms of barometer, one containing a liquid, generally mercury, called the Toricellian barometer, from the Italian who made the first barometer. The other barometer has a metal box from which the air has been removed, leaving a vacuum, with a flexible head or cover which moves in and out with changes in the outer pressure, this form of barometer is known as the Aneroid.

The Toricellian barometer may be made as follows: Procure a straight glass tube about 82 inches long; put a little mercury into it and by inclining the tube see if the mercury occupies the same length of the tube at every part. If the portion of mercury was one inch long at the beginning it should have that length at every part of the tube, if it shortens the tube is of greater diameter, if it lengthens of less diameter. In this way we select a tube of the same uniform bore from end to end. One end is now closed by softening, in a bunsen or other smokeless flame, and pressing the sides together. Fill the tube with pure mercury and gradually apply heat, beginning at the open end, until the mercury boils, then suddenly invert the open end, holding a pad of leather over it for the purpose, into a small dish of boiled mercury. It will be noticed that the mercury in the tube will fall, leaving a space between it and the upper end of the tube, until it stands at a level of about 80 inches above the surface of the mercury in the small dish or

reservoir. The tube and reservoir are now supported in a perpendicular position, generally fixed to a smooth board. Back of the upper end of the tube is placed a scale of wood, metal or paper, graduated in millimeters or inches and subdivisions, which, for convenience in reference, are sometimes indicated by numbers and the arbitrary terms, fair, rain, etc.

The action of the instrument is dependent upon the pressure of the air that rests upon the surface of the mercury in the reservoir. This pressure is transmitted by the mercury to that in the tube and therefore lifts and holds it up. The space between the upper end of the tube and the level of the mercury in the reservoir, depending upon the length of the tube, is then almost a perfect vacuum and there is, therefore, no pressure from above upon the column of mercury. The pressure is all from below and will raise the mercury until the weight of the column is equal to the pressure that is bearing upon it, it makes no difference whether the tube is one inch in diameter, or one foot, the pressure per equal area will be the same.

If the atmosphere which produces this pressure was always the same in weight per cubic foot, it would always push the column up to the same height, but, as a fact, the weight of the atmosphere is continually changing and the column must follow these changes, standing high when pressure is greater and falling as the pressure diminishes. Correction must also be made for changes in temperature. There are several causes for the change in weight of the atmosphere at any place. Vapor of water is lighter bulk for bulk, than air, the more vapor of water the air contains, the lighter it is. As we go up above surface of the earth, we leave some of the layers of air below us and thus have less air to press the column up. If the wind blows across a valley, it may, like the blast of air from the atomizer, produce a partial vacuum, when the column will fall.

There are two principal uses of the barometer: to aid us, with the help of other instruments, to predict the weather and to determine the relative elevation of different points, such as mountain tops, etc. The principles involved in these uses are given in describing the action of the barometer.

123. Diffusion of gases is that property in virtue of which they thoroughly mix, even in opposition to the force of gravity. A heavy gas carbonic acid gas, put below a light gas, hydrogen will rise, and the light one will fall until they are uniformly mixed. It is shown in mixing of the light and heavy gases in our atmosphere and the consequent purification of the air. It is also shown in the action which takes place in our lungs where the gases intermingle, in both these cases the same gases are concerned, carbonic acid gas and oxygen and nitrogen. The general rule of gaseous diffusion is that, the dense gases diffuse more rapidly than the lighter ones, the rate of diffusion varying inversely as the square root of the densities.

124. Isaac Newton discovered that "every body in the universe attracts every other body with a force directly in proportion to the product of the masses and inversely proportioned to the square of the distance between the centers of gravity."

The running of water in streams or the falling of a snowflake are caused by gravitation as also are the motions of the heavenly bodies in space.

Cohesion is that particular form of at-

traction which, acting at insensible distances, holds like molecules together.

Cohesion holds the molecules of zinc together and also those of iron, and the reason iron is stronger than zinc is, because the force of cohesion is greater between its molecules than between those of zinc and lead.

Adhesion is that force which, acting at insensible distances, holds unlike molecules together. Lead pencil marks are caused by the adhesion of the graphite (black lead) to the paper, and glue holds two pieces of wood together by adhering to them.

125. A crystal is a solid body, usually bounded by plane surfaces arranged symmetrically, according to definite laws. The plane surfaces by which a crystal is bounded are its faces, the line formed by two faces intersecting is an edge, and the inclination between two faces at an edge is the angle. With but few exceptions every crystal is so constructed that every edge, face or angle on one side, has its representative on the other side. Crystallization may be effected in three ways: by solution (sugar), by fusion and slow cooling (roll sulphur), by vaporization (flowers of sulphur). Crystals grow by a constant addition of new layers of material upon their exposed sides or surfaces. It is found that, through every crystal straight lines called axes can be drawn about which the matter of the crystal is symmetrically developed.

By the number, relative length, position and inclination to one another of these axes, crystals are distinguished.

126. The six principal groups or systems of crystals, founded upon the relation of their axes, are as follows: Regular or cubical, tetragonal, hexagonal, rhombic, monoclinic, and triclinic.

Regular or cubical crystals have three axes of equal length, at right angles and crossing at the center.

Tetragonal crystals have three axes at right angles, two of equal length, the other one differing from these.

Hexagonal crystals have four axes, three of equal length in the same plane inclined at an angle of  $60^\circ$  to one another, and the fourth at right angles to them.

Rhombic crystals have three axes of unequal lengths at right angles.

Monoclinic crystals have three axes, two at right angles to each other and the third or main axes at right angles to one and inclined to the other.

Triclinic crystals have three axes all inclined to one another.

127. When a liquid comes into contact with a solid which it is capable of wetting (alcohol and glass) it is found that, at the place of contact the liquid will rise above its general level. If it cannot wet the solid (mercury and glass) it will be depressed at the place of contact below the general level. These effects are most apparent when the liquids are confined between surfaces near together, such as sheets of paper, glass, etc., or in very fine tubes, and from the fact it was first observed in small, hair-like tubes it was called capillary (capillus, a hair) attraction. It is known to be merely one form of adhesion. It is necessary to make proper allowance for capillarity in measuring liquids in graduates or pipettes or an error will be introduced. The action of blotting paper is due to capillarity.

128. Osmosis. When two liquids of different densities are separated by a porous partition, it will be found, after a varying interval of time, that the liquids are perfectly mixed even in opposition to gravitation. The result is to liquids what diffu-

sion is to gases and is called liquid diffusion or osmosis.

Under the name of dialysis it has been used, within recent years, to separate crystalloids from colloids. Crystalloids are those substances which will form crystals, sugar, common salt and other salts.

Colloids are amorphous substances which form more or less glue-like masses when moist, such as glue, gelatin, gum and starch.

If we had a mixture containing gum arabic, common salt, sugar and water and should put it into a glass dish having a bottom of parchment paper or bladder, and then hang this dish into another dish of pure water, we would find after a little time had passed that the water in the outer dish would taste of the salt and sugar, but chemical test would fail to reveal more than a trace of the gum; after the lapse of a few hours the sugar and salt would thus be almost entirely separated from the other constituent. It is found that two currents are set into motion, the one which goes to the denser fluid is called the endosmotic current and the other is called the exosmotic current. In pharmacy we prepare ferrum dialysatum by this method and in nature it is the supposed cause of the ascent of sap in the trees.

129. Newton's Laws of Motion: (1) Every body continues at rest or in uniform motion in a straight line unless compelled to change that motion by some external force. (2) Every motion or change of motion is in the direction of the force impressed and is proportional to it. (3) Action and reaction are equal and opposite in direction.

130. Energy is the ability to overcome resistance, but this ability may exist without being exercised. Energy, which is doing or moving, or overcoming resistance through space is called kinetic, while energy that is stored up, or has the power to do although not yet doing, is called potential. These energies are convertible one into the other and their sum is always the same quantity. We can exchange kinetic energy for potential or potential for kinetic, but we can destroy neither.

## Questions, Fourteenth Series.

### PHARMACOGNOSY.

References: "Principles of Pharmacognosy," by Fückiger and Tschirach, translated by Power; also chapters on morphology and structural botany in botanical text books.

151. What is the characteristic difference between a bast cell and a wood cell?  
152. Describe the arrangement of the fibro-vascular bundles in a palm and state how it differs from that observed in the oak?

153. What is a mericarp?

154. What is a legume, and name one that is official? (U. S. P., 1890.)

155. Describe a pepo and name one that is official? (U. S. P., 1890.)

156. Describe a panicle, and name one that is official. (U. S. and Br.)

157. Describe a berry, and name those that are official. (U. S. P., 1890.)

158. Describe a utricle and name an official specimen.

159. What is the principal characteristic of the fruits of the umbelliferae? and name some official specimens.

160. Where is the milk juice of plants found, and what milk juice is official?

## The Interstate League.

At the meeting held Friday, June 15, the New York county branch of the Interstate Retail Druggists' League went through the ceremony of installing officers to serve during the coming year. Beyond this, little of interest transpired. The secretary read a letter from President Canning, which contained many references to the successful work of the League in organizing druggists throughout the country. With regard to the "vaseline" controversy Mr. Canning suggested that the New York branch act as an independent association and request the endorsement of other associations at its own option. This he recommended to be done during the interval which must elapse before the presentation of the resolution at the next convention of the national body.

President Rontey then read the following letter which he had forwarded a few days previous to Mr. Canning:

NEW YORK, June 11, 1894.

To Mr. Canning, President of the Interstate Retail Druggists' League:

DEAR SIR: At the last meeting of the "New York Branch of the Interstate Retail Druggists' League" it was moved, and adopted, that I should communicate with you and state such views as in my opinion would most likely bring about the accomplishment of the League Plan.

In view of the multiplicity of plans that have been offered and of those that have been tried, it becomes an impossibility to offer anything really new, or any modification of them promising sure success; at best only exposition of objectionable features of the present plan can be expected, and such modification as may promise aid to a difficult undertaking.

As you are doubtless aware our success up to the present in recruiting members has been but indifferent. Instead of rallying to their interests and coming in readily at the first call a considerable number of druggists have kept aloof from the league and many of those whose names appear on our roll not only do not attend our meetings, but do not seem disposed to pay their dues.

As our first year is now over and dues for a second are in order it is feared that the number on our roll will greatly diminish. How to prevent this and from the number that do pay to meet our expenses and pay our quota to the general league is the problem now confronting us.

Of over 450 names on our roll we cannot claim this number as representing our real strength now, although should we be able to assure success this number would doubtless prove valid.

The stand the New York branch took relative to the "Vaseline" incident has brought us a number of new members and woke up some of the slothful ones, and will probably bring us some more; but for all that the situation calls for something still more effectual if we would succeed or even outlive another year.

It is my conviction that the proprietors of patent medicines should be aroused to an appreciation of the danger threatening their business and to remedy their fault at the outset of the cutting evil by taking an active hand in our effort to rehabilitate their now

preciated goods and not leave us struggling for the needed 80 per cent. stipulated in the Chicago plan.

Should we fail—and an effort like ours if not successful at its first impulse, according to all teachings of experience, generally falls through—the patent medicine people will be the greatest losers, for, as I have suggested, the League could adopt and patent a label of its own and replace with its own equivalent preparations all the familiar nostrums; as has already been done by some of the original cutters who made cutting but a cheap advertising means to finally introduce their own preparations. See Riker's list: Macy's sarsaparilla, expectorant, emulsion of cod liver oil, etc., etc., and Bloomingdale's full list of some doctor's remedies.

Owners of patent medicines should not be blind to the fact that if New York cannot restore reasonable prices on their goods, prices will not be kept up throughout the country for any length of time, as no branch of the League will be able to maintain itself if New York remains open to the enemy, any more than an army can avoid defeat when its center is routed.

I would suggest that the patent medicine people lower the percentage required by the Chicago plan to simply a sure majority (as 80 per cent. is too difficult to attain here), or to put the wholesale price of their medicines to retail druggists up to the full retail price for a season, with the proviso that only members of the League shall be allowed a commission on their sale, and that only when the League has for membership the required 80 per cent. of its members.

If either of these two propositions should be adopted I feel confident that the New York branch of the League can promise success; if not, it is possible that the present members may consider the patent medicine branch of their business as not worth further labor.

Leaving to you to pass upon the practicability or impracticability of the above propositions, with full confidence that you will do whatsoever you can to aid us to success, I remain,

Very respectfully yours,

A. M. RONTÉY.

T. B. Breen addressed the association in advocacy of the appointment of an attorney, to whom might be referred all legal questions that might come up, and finally made a motion to the effect that an attorney be selected for appointment as legal adviser. Mr. Searles thought it would be better to refer the matter to a committee and offered an amendment to that effect. This was adopted and Messrs. Breen, Erb and Utley were appointed a committee of three to consider the advisability of appointing an attorney to the League.

After transacting some routine business the meeting adjourned. The next meeting will be held in the Mott Memorial Hall, 64 Madison avenue, on Friday, July 6, at 3 P. M.

## Kings County Pharmaceutical Society.

This society held the last regular meeting of the season on Tuesday, June 12.

After the transaction of routine business, consisting largely of reports of officers and committees, the announcement of new committees for the coming year was made.

A delegation was appointed to attend the meeting of the New York State Association at Saratoga, consisting of Edward Alt, Wm. P. De Forrest, Adrian Paradis.

An interesting report was received from the delegation attending the New Jersey State Association held at Asbury Park, May 23 and 24, Wm. M. Davis, D. L. Cameron, and Professor Schimpf attending.

The committee on matters pertaining to pharmacy reported through F. H. Pamphilon. He had turned his attention to some things in which druggists had to meet competition from all points, and selected first that of "Ammonia" as obtained from department stores and grocers.

Twenty-four samples had been obtained in different parts of the city of Brooklyn, the prices ranging from 3 cents to 24 cents per bottle, and bottles varying from 9 to 15 fluid ounces capacity, and having

## Names of Students Whose Grade Stood 75 on the Eleventh Series.

James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wiconisco, Pa. T. H. Breuneman, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstien, S. Dak. G. E. Barksdale, Richmond, Va.

Miss Maude Florence Cain, Lancaster, Pa. J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn. H. J. Force, Newark, N. J.

William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.

Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.

A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwardsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada. H. G. Lavallo, Gouverneur, N. Y.

C. J. McCloskey, Jersey City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L. Milla, Boston, Mass. Thomas W. Murphy, East Bradey, Pa. John R. Murray, Centerville, Tenn. W. B. Nethery, Toronto Junction, Ont.

Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala.

A. V. Rand, Wolfville, N. S.

Aber Y. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smurl, Parsons, Pa. W. A. Sickel, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.

Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.

W. H. Van Strander, Winsted, Conn. Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

many titles, as "Champion" "Laundry" "Reliable," "Pure," *ad infinitum*.

One bottle, bought for 10 cents, proved to contain 15 per cent of  $\text{NH}_4$ , (quite evidently a mistake of the bottler). Another was found which showed 12.75 per cent. The line, however, ran from 9.9, 9.35, 9.30, 9.00, 8.00, 7.80, 6.00, 5.30, 5.00, 4.80, 4.00, 3.80, 3.15, 3.00, 2.80, 2.30, 1.84, and a total average of 6.30 per cent.

Professor Schimpf used this report as an example of the simplicity of modern volumetric analysis, by which method Mr. Pamphilon had finished this line of samples in a far shorter time than possible if  $\text{NH}_4$  had been brought to a salt and determined gravimetrically.

The plan was applicable not only to acids and alkalies, for which, if not tested, we are absolutely dependent for strength upon the label, but for many salts, as silver nitrate, rochelle, and epsom salts; for lime juice, solution of soda, solution of potash, the last three being examples of much handled and well known materials, of which nothing can be known except by testing. The starting principle being that an alkali will neutralize an acid, as every boy knows, then with determined strength of an alkaline solution, a given amount of that which has saturated an acidulous substance in solution, will show the strength of the latter, and *vice versa*. To show when that saturation is accomplished instead of trying many times with litmus paper, we add a drop or two of litmus solution to the liquid being tested, or of a solution of phenolphthalein, the change in color showing the saturation point.

Some seemed to think a burette to be a most dangerous article to have on hand, while it is really only an accurate *graduate turned upside down*, and costing but little more than a good graduate, and in using it, a man need have no knowledge of chemistry whatever, as the tables in the Pharmacopoeia of 1890 give for each Cc. of acid solution used, the percentage result of the alkali being tested for.

O. A. A. Rouillon offered a method of exhibiting creosote in pills and showed samples, which proved very neat:

Creosote .....m. xx  
Sodium benzoate.....gr. xl

Mix well and make into pills No. xx, no excipient being needed.

Under "Trade Matters" Luther F. Stevens read a paper entitled "What I know about Vaseline." This paper was printed in the June 14 issue of THE AMERICAN DRUGGIST. He supported his statements by referring to old records of the society and by a line of advertisements and circulars issued by the vaseline proprietors during a series of years. Mr. Stevens also gave a table of melting points and other data determined on July 9 and 11, 1890, of four samples of vaseline and petroleum purchased recently from retailers.

A. "Blue seal vaseline," purchased from wholesaler several months ago.

B. White label vaseline, from a  $\frac{1}{2}$  lb. round tin can, originally from the wholesaler about two years ago. (The bottom of the lot taken.)

C. Vaseline "No. 1," in pasteboard, regular carton, with print on top. Fine vaseline, size No. 1. Price in the United States 15c.; price in England 6 pence, containing a one ounce bottle with red seal and wrapped in a paper having on one side the price lists at that time put out, and on the reverse side the circular dated Dec. 26, '93, and another of "Caution."

Original date of the package unknown, except from above data.

D. Petrolatum of light color, opaque, in one ounce bottle.

Maker and original purchaser of bulk lot unknown.

Sample.	Began to yield.	Soft.	Melting point.	After 10 minutes at this were all flowing freely.	Ten minutes at this heat, all were thin and clear.
A.	91.	91.	97.	97.	100.
B.	89.	93.	95.	Med. um.	Thickest.
C.	91.5	94.	95.5	Thinnest.	Thinnest.
D.	92.	104.	108.	Thickest.	Medium.
				113.	115.

Equal weights of 5 grammes from each sample were subjected to the same conditions at the same time. Temperature is in Fh. by a thermometer of known variation. The figures are the result of all corrections and averages after two distinct trials of June 9, evening, and June 11 A. M.

Those present who had been in business during this time and knowing of the matters spoken of, said that the paper read and the running comment could well have been much stronger and still been far within the truth, as tests had been made before at different times and exhibited at society meetings.

Under the title "Recipes," the Charles E. Hires Co. of Philadelphia have issued a very useful little book of formulæ. Recipes are given for the manufacture of flavoring extracts, handkerchief extracts, toilet water, cologne, bay rum, etc., etc. The book is published at \$1 and can be had through any dealer.

#### The Modern Drink.

Some two years ago Sir William Jenner, Queen Victoria's physician, recommended Her Majesty to stop drinking claret and champagne and substitute Scotch whisky and Apollinaris water, in the proportion of about four parts of water to one of whisky. It is said that the Prince of Wales tried the beverage and liked it so well that he adopted it, which was sufficient to insure a fashionable following in England, and now, whisky with effervescent water has become the fashionable modern drink everywhere.

There can be no question but what there is real merit in this prescription. As a rule, non-acid drinks agree with most people better than acid drinks, although the contrary view has been generally entertained. There can be no doubt but that good whisky is the purest and least hurtful of all stimulants, if diluted sufficiently, and, in the proportion of four parts of water to one of whisky, it is comparatively harmless, and our best American whisky, such as James E. Pepper's, is superior, for drinking cold, to Scotch or Irish whisky.

#### Sulphur as an Insecticide.

Leggett & Brother, 301 Pearl street, New York, who are manufacturers and patentees of a line of powder guns for distributing dry insecticides and fungicides, have issued an illustrated catalogue of these implements. The catalogue will be of value to druggists doing business in rural districts, as it contains a useful list of the machinery used in applying

insecticides to vegetables, grapes, cotton, etc. One of the substances recommended for application to infested bushes, vegetables, etc., is "Flowers of Sulphur" This is the product of D. H. Gray, 113 Maiden Lane, New York, and should be distinguished from the ordinary flour sulphur, which is less useful in this application. D. H. Gray is headquarters in this country for the different preparations of sulphur and is the largest manufacturer of the sublimed variety.

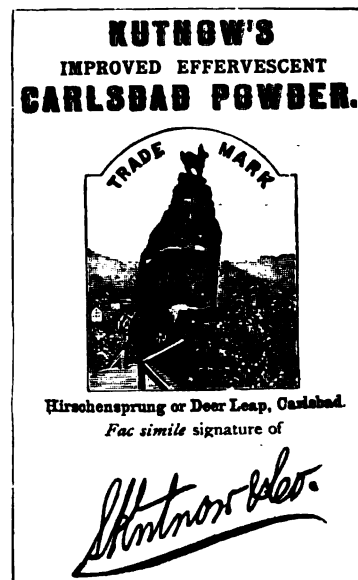
#### A Delightful Sail.

A delightful sail is that furnished by the Old Dominion Line from this city to Norfolk, West Point or Richmond. The service is most excellent in all respects and this route gives the maximum amount of sea air with the minimum risk of the discomforts occasionally attending sea voyages. It is rarely that the ocean is so rough on the route selected by this line as to try the sailing qualities of the passenger.

Those who attended the Old Point Comfort meeting of the A. P. A. will recall with delight the voyage on the steamer and it is probable that many who contemplate visiting Asheville this fall will desire to make a portion of the journey over this route, which will take them past the historic spot where the Monitor proved to the world the fighting efficacy of the new departure in naval architecture.

#### A Curious Law Suit.

What is probably the most curious and peculiar lawsuit ever inaugurated in an American court of law has just been commenced in the United States Circuit Court by the city of Carlsbad in Bohemia, against the firm of Kutnow Brothers of 53 Lafayette place, New York City. The firm here are the American branch of the London house of the same name, and are engaged in the introduction in this coun-



try of what is called "Kutnow's improved effervescent powder." As put up, this preparation bears an engraving of what is called the "Hirschsprung," or deer leap, a well known public object of Carlsbad. The city of Carlsbad makes the claim that Kutnow Brothers make and sell Carlsbad salts and water in violation of its charter rights, and on this basis the lawsuit referred to is brought. The accompanying cut is an exact reproduction

of the label used by Kutnow Brothers, and from it our readers can gain an idea as to the grounds of complaint.

Lawyers here do not at first know what to make of the announcement that such a suit has been brought. But we are able to present in our columns some interesting extracts from an English newspaper, showing how the same matter was in litigation in English courts for three years, with the result that the city of Carlsbad was defeated. Good legal authorities who have looked at the matter in the light of this information from the other side say that there is certain to be a similar ending to the case here. The London Times gives the following report of the case, which had been brought before the High Court of Justice, Chancery Division. Mr. Justice North—one of the most distinguished and brilliant jurists of Great Britain—tried the case and decided all points in favor of Mr. Kutnow. The Times says:

Mr. Justice North decided all points in favor of the applicant, Mr. Kutnow, and dismissed the appeal of the municipality, with costs. His Lordship had never heard that a person might not adopt as a trademark the picture of a well-known object that was the property of some one else. It might as well be suggested that a London tradesman could not properly use the device of the Tower because it was the property of the government; or that an Edinburgh shop-keeper might not place a picture of the Castle on his goods or wrappers. The "Rock and Chamois" were well known to be a public object at Carlsbad, and suggested the name of Carlsbad in connection with the powder, just as much as if the word had been spelt in eight letters. As showing that the effects of the trademark as a whole was not likely to deceive the public into the belief that the applicant's powder was a natural as opposed to an artificial product, his Lordship observed that the mark described the powder as improved and effervescent. Mr. Kutnow's powder was improved, for it contained an addition which disguised or took away the nasty taste of the natural spring, and it was made effervescent, a quality that the natural salts did not possess.

The suit in the United States Court is for \$20,000, but there is no likelihood whatever that the legal processes of the United States will ever help the city of Carlsbad to collect either that or any other amount on the grounds indicated.

### Chemicals.

#### REVISED PRICES.

Rosengarten & Sons, manufacturing chemists, Philadelphia, in a circular issued under date of June 15, announce the following revision in prices:

Bismuth, metal	.....	\$1.60 per lb.
" " by 25 lbs.	.....	1.50 "
" citrate	.....	2.20 "
" " by 5 lbs.	.....	2.15 "
" " & ammon, soluble	.....	1.50 per oz.
" " " by 5 lbs.	.....	2.15 "
" " " solution	.....	1.50 per oz.
" nitrate crystals	.....	1.25 per lb.
" " " " "	.....	1.00 per oz.
" oxide, hydrated	.....	2.25 per lb.
" " " " "	.....	1.50 per oz.
" oxychloride	.....	1.75 per lb.
" " by 25 lbs.	.....	1.70 "
" salicylate	.....	2.25 "
" " " " "	.....	1.60 per oz.
" subcarbonate	.....	1.85 per lb.
" " by 25 lbs.	.....	1.80 "
" subgallate	.....	4.50 "
" " " " "	.....	.30 per oz.
" sublimate	.....	3.00 per lb.
" " " " "	.....	.20 per oz.
" subnitrate	.....	1.55 per lb.
" " by 25 lbs.	.....	1.50 "
" tannate	.....	2.25 "
" " " " "	.....	.15 per oz.
" valerianate	.....	.35 per lb.
Chloral, hydrate, bulk	.....	.85 "
" " 1 lb. g. s. b. incl.	.....	.95 "
" " " " " "	.....	.90 "
" " 1 lb. g. s. b. incl.	.....	1.00 "
Cocaine, hydrochlorate, cryst., 1 oz.	.....	4.75 per oz.
Hydrogen, peroxide, U. S. P., bulk	.....	.25 per lb.
" " 1 lb. c. b. incl.	.....	.35 "
" " " " " "	.....	.26 "
" " " " " "	.....	.26 "
Iron, citrate, U. S. P.	.....	.57 "
" " and ammonia	.....	.53 "
" pyrophosphate, scales	.....	.53 "
" " U. S. P.	.....	.58 "
" phosphate, U. S. P.	.....	.55 "

Acetate, muriate and sulphate of morphine, by 25 ounces or more,	
\$2.20 per ounce, including 1/4 oz. vials in 1 oz. boxes.	
\$2.15 per ounce, including 1/4 oz. vials in 3/4 oz. boxes.	
\$1.95 per ounce including 1 oz. vials.	
\$1.90 per ounce in bulk.	
Potassium, citrate	\$0.44 per lb.
Quinine and iron, citrate, U. S. P.	1.55 "
" " " " " " " " " " " "	1.50 "
" " " " " " " " " " " "	1.55 "
Quinine and iron, citrate, U. S. P.	
soluble by 5 lbs.	1.50 "
Sodium, citrate	.47 "
" salicylate	1.15 "
" " by 25 lbs.	1.10 "

### Advance in Beef Extract.

The Cudahy Pharmaceutical Company have advanced the price of Rex Brand Extract of Beef, taking effect June 1, as follows:

2 ounce size from	\$3.65 per doz.	to	\$3.85
4 " " "	6.75 " "	" "	7.00
8 " " "	12.05 " "	" "	13.00
16 " " "	23.05 " "	" "	24.00
5 lb. tin	8.50 each	" "	8.75

The Cleves Drug Company were incorporated at Albany on the 8th inst. to conduct a wholesale and retail drug business in Binghamton; capital, \$5,000. Directors: William B. Cleves, E. Christene Cleves, and Mary C. Norton of Binghamton.

### Review of the Wholesale Market.

NEW YORK, June 20, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

There is yet a notable absence of important demand in the several departments of drugs, dyestuffs and chemicals, and importing houses do not report any increase in the receipt of orders for original packages. Speculative interest is still of a very tame character, buyers evincing a disposition to proceed in a slow and cautious manner. The market taken as a whole is fairly steady, and the outlook for the summer trade is regarded as favorable. Prices are fairly well sustained with few changes of importance to note. Acetic acid has declined and the breakdown in price of the metal bismuth has resulted in a lower range for its preparations. Gum arabic, sorts, is hardening. Opium has reacted and is now in improved position both here and abroad.

#### ADVANCED.

Opium.  
Caffeine.  
Menthol.  
Canary seed.

#### DECLINED.

Soap bark.  
Bismuth salts.  
Morphine.  
Spanish saffron.  
Senega root.

ALCOHOL is without change, the Trust range remaining \$2.18 @ \$2.22 with the usual discount.

ARNICA FLOWERS have continued quiet and the market has an easy appearance with 9 @ 10c. quoted.

BALSAMS.—There continues a dull market for all descriptions, though no quotable change is reported. A lot of 25 cases Tolu just arrived has been disposed of on private terms. Canada fir is easier, with spot supplies obtainable at \$2.50.

BARKS have shown no action of special importance. Cascara sagrada held at 5 1/2 @ 6 1/2c., with 5 @ 6c. bid; elm 10 1/2 @ 12c.; sassafras 6 1/2 @ 7c.; soap offers at 3 1/2c. for whole and 4c. for cut and crushed.

BISMUTH PREPARATIONS have undergone a material reduction following the recent fluctuations in price of the metal. The cut amounts to a reduction of 45c. per lb. all around. A list of manufacturers' quotations is given in another column.

BUCHU LEAVES have found a very limited sale during the week, though holders maintain their limits at 8 @ 9c. for short. Long is almost out of market and quotations are nominal.

CAFFEINE is scarce upon spot and for the limited quantity available \$2.30 @ \$2.40 is asked.

CACAO BUTTER, Dutch bulk, continues very quiet and the market has an easy appearance. Sales have recently been made at 31c., though 31 1/2c. is generally quoted as inside.

COD LIVER OIL, Norwegian, is meeting with a satisfactory jobbing inquiry, numerous small sales being reported at the range of \$26 @ \$27. Prime Lofoden has sold to the extent of 100 bbls. at \$27.

CUTTLE BONE, Trieste, is inquired for to an increased extent, and we are reported numerous sales at the range of 8 1/2 @ 8 3/4c. as to quantity.

ERGOT continues very dull and prices are nominally unchanged.

GUARANA continues to experience a steady, fair inquiry and we are reported numerous sales of quantity lots. The jobbing quotations remain 90c. to \$1.

LYCOPodium is yet held at 53 @ 56c., the latter for Pollitz.

MENTHOL continues to rule firm and an advance is reported abroad. Holders here are offering stock with less freedom, and \$5.50 @ \$5.75 is generally required.

MORPHINE, in curious contradiction to the tendency of opium, is lower, manufacturers having reduced their quotations as follows: bulk \$1.90, ounces \$1.95, and eighths \$2.15 @ \$2.20. Outside brands can be obtained at a lower range, say 20c. less than bulk.

OPIUM has strengthened a trifle during the week, but the market is yet in a very sensitive condition. Dealers here were surprised early in the week by the receipt of cable advices announcing an advance in the Smyrna market. The fact that no direct cables were received from either Smyrna or Constantinople (the information sent having come through London) was regarded as a singular feature and gave an uncertain tone to the market. The advices referred to were confirmed later by cables from Smyrna advising an advance in the price of opium to 95. "Opium is dead," is the laconic way in which the Constantinople correspondent of *Chemist and Druggist* describes the condition of the drug in that market. Quotations here are merely nominal. Sales of single packages of high test goods have been made at \$2.25 with \$2.12 1/2 @ \$2.15 asked for ordinary quality. The price of jobbing quantities is now \$2.15 @ \$2.20 and for powdered the quotation is now \$2.90 @ \$3.

QUININE has sold to a moderate extent in jobbing quantities. Important interest in original packages is yet lacking, but the tone of the market is firm. Foreign is held at 22 1/2 @ 23 1/2c. as to brand and quantity, and the trade requirements are being met at this range.

SAFFRON, Spanish, continues dull and with freer offerings purchases can be made down to \$5. for Valencia.

TONKA BEANS, Angostura, have been in demand and among other transactions we note a sale of 200 lbs. at \$2.

### DYESTUFFS.

CUTCH is maintained steadily at the previous range of 5 1/2 @ 6c.

DIVI DIVI is in less abundant supply and with the stock under good control prices are maintained at 70 @ 75c.

GAMBER continues quiet with the tone of the market easy. Steamer goods from store are offered at 3 1/2c. and for sail stock in quantity 4 @ 4 1/2c. is quoted as accepta-



ble. In a jobbing way up to  $4\frac{1}{2}\%$  c. is asked.

NUTGALLS, Blue Aleppo, are quoted at 13 @ 14c. as to quantity, but important demand is absent.

SUMAC is in better supply and slightly easier with \$67.50 @ \$70 quoted for spot goods.

#### CHEMICALS.

ALUM is moving fairly in a jobbing way with the current sales of \$1.75 for lump and \$1.80 @ \$1.85 for ground.

AMMONIUM CARBONATE is scarce and values are tending higher. Domestic in lots of 10 casks offer in some instances at 8c. Single cases are held at  $8\frac{1}{2}\%$  c. We quote German  $8\frac{1}{4}\%$  c. and English  $8\frac{1}{2}\%$  c.

ARSENIC, White, continues to find sale in a moderate way at the range of  $3\frac{1}{2}\%$  @  $3\frac{3}{4}\%$  c. as to brand and quantity.

ACETATE OF LIME continues in good demand, with the market firm at 90 a 95c. for ground, and \$1.60 @ \$1.65 for grey.

BRIMSTONE, crude seconds, continues very quiet, parcels to arrive quoted \$16.25 @ \$16.50, and forward shipment \$15.75 @ \$16.

BLEACHING POWDER continues quiet, without, however, any quotable change in price. The market appears to be steady upon the basis of  $2\frac{1}{2}\%$  c. for German, and  $2\frac{1}{4}\%$  @  $2\frac{1}{2}\%$  c. for English, as to quantity.

BLUE VITRIOL is in good demand and with only a moderate supply available holders continue to ask  $2\frac{1}{2}\%$  @ 3c. as to quantity.

BORAX shows no action of any consequence. The price remains  $8\frac{1}{4}\%$  @  $8\frac{1}{2}\%$  c. for refined, and  $7\frac{1}{2}\%$  @  $7\frac{3}{4}\%$  c. for concentrated.

CHLORATE OF POTASH is jobbing at  $13\frac{1}{2}\%$  @  $13\frac{3}{4}\%$  c. for German and English, respectively. Powdered is held at 14c. The demand is generally restricted to small and unimportant lots.

CREAM TARTAR, powdered, is a trifle unsettled, and some outside holders are quoting down to  $17\frac{1}{2}\%$  c. The nominal range is  $17\frac{1}{2}\%$  @ 18c.

NITRATE OF SODA shows no action of any consequence, but the market remains steady at  $\$2.22\frac{1}{2}\%$  @  $\$2.30$  as to quantity.

OXALIC ACID is quoted  $6\frac{1}{2}\%$  @  $6\frac{3}{4}\%$  c. for German and English. There is, however, very little inquiry at the moment.

SAL AMMONIAC, White grain, is scarce and firm at  $6\frac{1}{2}\%$  @ 7c. for English and German.

SAL SODA, English, is generally held at 90 @ 95c., but domestic is obtainable at 80 @ 85c., less the usual discount.

TARTARIC ACID continues selling in moderate quantities at  $21\frac{1}{2}\%$  @ 22c. for crystals and 22 @  $22\frac{1}{2}\%$  c. for powdered.

#### ESSENTIAL OILS.

ANISE continues in moderate inquiry and prices are fairly well sustained at the previous range of, say, \$1.50 @ \$1.55.

BERGAMOT, Sanderson's, has been reduced to \$2, but the decline has not resulted in any material increase in the distribution.

CASSIA continues to offer at  $82\frac{1}{2}\%$  @ 85c. for native though only small parcels are reported as changing hands.

CLOVE is finding sale in a small way at 52 @ 60c. for bud and 50 @  $52\frac{1}{2}\%$  c. for stem.

CUBEB is dull, but prices are nominally unchanged, the quotations remaining \$1.35 @ \$1.45.

LEMON is reported as moving in a very limited way at 80c. @ \$1.35 as to brand.

ORANGE is meeting with moderate inquiry, but prices are nominally unchanged.

PEPPERMINT, bulk, has been more actively inquired for, and among other transactions we notice a sale of 500 lbs. for export on private terms. The quotation of the market ranges from \$2.30 @ \$2.60 as to quality. HGH remains quiet here, with \$3 the nominal price.

#### GUMS.

ALOE, Curacao, in boxes continues scarce and firm at 3 @  $3\frac{1}{4}\%$  c.

ARABIC, sorts, are wanted and values are hardening with  $10\frac{1}{4}\%$  @ 11c. quoted firm for the small available supply.

ASAFETIDA is held at previous values, and a moderate jobbing inquiry is experienced; quoted 22 @ 25c.

CAMPHOR, refined Japanese, is a trifle unsettled and forward delivery goods are offering at low values. Domestic is offering in some instances from the outside at  $39\frac{1}{2}\%$  @  $40\frac{1}{2}\%$  c. for bbls. and cases. Japanese is held at  $39\frac{1}{4}\%$  c.

CHICLE is showing some indications of firmness without, however, any quotable change in value. In most instances 26 @ 27c. is asked and it is difficult to shade the inside figure.

SENEGAL continues quiet though importers do not show any disposition to increase the distribution by making price concessions.

SHELLAC continues quiet. The present purchases are mainly for consumptive purposes and with the view of covering present wants. Prices are without quotable change.

#### ROOTS.

ALKANET is generally held at  $6\frac{1}{4}\%$  @ 7c., but 2,000 lbs. changed hands the other day for a consideration of 6c.

IPECAC continues to sell in a small way at the range of \$1.10 @ \$1.20 as to quality.

JALAP is maintained at,  $\frac{1}{4}\%$  @ 20c. for prime grades though buyers' ideas are below this range.

SARSAPARILLA, Mexican, is in good demand for export, but the stock here is of small proportion and business is therefore restricted; jobbing sales are making at the range of  $9\frac{1}{2}\%$  @ 10c.

SENEGA is quoted lower from the West, holders there offering round parcels at 33c.

SNAKE continues held at 30c. though there is little or no inquiry for the article at the moment.

#### SEEDS.

ANISE continues in moderate demand with the current sales at  $8\frac{1}{2}\%$  @ 10c. for Italian.

CANARY, Smyrna, is firmer, and prices have advanced,  $2\frac{1}{2}\%$  @  $2\frac{3}{4}\%$  c. being generally asked.

HEMP, Russian, is firmer, better reports from primary sources elevating the ideas of holders.

MUSTARD is quiet, and the same may be said of other descriptions.

#### PAINTS, OILS AND COLORS.

WHITE LEAD.—Dry lead is taken with indifference; carload lots have been sold in a few instances at  $4\frac{1}{2}\%$  c. with the usual discount for cash. Lead in oil has been in good demand, but the volume of business is hardly up to the average for the season. Dry lead is quoted at  $4\frac{1}{2}\%$  c. and lead in oil 5c. for original packages, these prices being subject to the usual trade discount.

RED LEAD is without important change, and the condition of the market is much the same as it has been for several weeks.

Some holders are offering single ton lots at  $5\frac{1}{2}\%$  c. net cash, and some are of opinion that even this price could be shaded upon a firm bid.

LITHARGE.—A few unimportant orders have been placed for low grade goods, but the market is dull and weak.

ORANGE MINERAL continues dull, and while prices are not positively lower, they still lean more or less in buyers' favor.

ZINCS, foreign, are somewhat irregular in price, with German quoted as low as 5c. for future delivery.

COLORS, etc., are without important change, and business is confined to small and unimportant transactions.

LINSEED OIL is meeting with better sale, and the product is under better control with prices very firm throughout. Western and Eastern brands are quoted 1c. higher.

SPIRITS TURPENTINE is nominally unchanged, and we quote the range at 3c @  $30\frac{1}{2}\%$  c.

## Druggists' Exchange.

*Suitable notices of moderate length under this heading inserted one time free; for each additional insertion Fifty Cents. Write distinctly, on one side of paper only, and do not use postal cards.*

#### POSITIONS VACANT.

WANTED.—A drug clerk with 6 to 8 years' experience; location western New York State. Full particulars may be learned by addressing "Quinine," 302 Delaware avenue, Buffalo, N. Y.—25.

CLERK WANTED, neat, accurate and quick, with city experience; salary to begin with moderate; good chance for advancement; state salary wanted and experience. Address "New Store," care this office.

#### POSITIONS WANTED.

Would like to correspond with patent medicine companies to do advertising in large or small towns or certain territory in Western New York at reasonable rates. Address Arthur H. Hitchcock, Mayville, N. Y.—25.

LICENSED PHARMACIST, experienced in prescription work and manufacturing; good salesman; first-class recommendation; desires position with a druggist who has a good retail trade or to manage. Address "339," care of this office.—26.

SITUATION WANTED as clerk in drug store, Arkansas preferred; have had four years' experience; best reference; can furnish a few hundred dollars if desired. Address "Phenacetine," care of this office.—26.

POSITION WANTED.—Drug clerk, aged 26, over three years in the business, at liberty June 30, wants a place in a pharmacy doing a good prescription business. J. H. E., Box 40, Meredith, N. H.—24.

WANTED.—Situation either in store or as salesman, by pharmacist licensed in Connecticut; has had experience with trusses and surgical instruments. Address Lock Box 337, Thompsonville, Conn.—24.

DRUGGIST who has traveled the eastern part of Pennsylvania quite extensively will represent wholesale house or specialties in above territory on commission; best references given. Address "Hustler," care of this office.—24.

POSITION WANTED by a graduate of the Brooklyn College of Pharmacy; registered in New York and New Jersey; six (6) years' practical experience; city or country; age 28; can furnish best of references. Address "Competent," care this office.—24.

SITUATION WANTED.—An experienced salesman and detail worker among druggists and physicians; 10 years on the road. John H. Nelson, M.D., Bangor, Mich.—24.

DRUG CLERK, relief, has 2 days open. Address "Graduate," 559 Clinton street, Brooklyn.—24.

(Continued on page 6.)

# American Druggist and Pharmaceutical Record.

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The AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD is issued on Thursday of each week. Changes of advertisements and all copy for publication should be received before Tuesday of each week.

We are not responsible for any money paid to agents. All remittances should be made direct to this office. Express Orders, Post-Office Orders and Drafts on New York should be made payable to the American Druggist Publishing Company and addressed to them at 87 College Place, New York.

THIS issue closes the twenty-fourth volume of the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD. A glance at the semi-annual index will give some idea of the immense amount of practically valuable information which has been given our readers during the past six months. We feel that we can unhesitatingly say that no better record of the pharmaceutical progress during that period exists. We have determined to largely increase our news service and to give a correspondingly larger quantity of reading matter, the very flattering success with which our efforts during the past year have been met, warranting us in going to still greater expense in this direc-

tion. We have also determined to issue the paper semi-monthly instead of weekly the paper being issued regularly on the 10th and 25th of each month thereafter.

## UNIVERSITY SCHOOLS.

AT an informal gathering recently a prominent educationalist ventured to express it as his opinion that the consolidation of the independent college of pharmacy with the university was merely a matter of time. While the statement was made in somewhat less general terms, a particular institution having been designated, the inference was that the statement was general in its application.

A decade earlier such a statement would have met with very scanty acceptance, and even now its supporters are probably in that minority to which it is a distinction to belong. That this idea has grown in favor, however, cannot be gainsaid, and it is nothing to the detriment of the independent schools that this is true.

The complex conditions of modern life furnish the stimulus toward specialization in education. As paradoxical as it may seem this very specialization is best accomplished, not by isolated study either by the individual or by the independent institution, but by co-operation both between the individual students and the individual institutions interested in allied branches.

The breaking away of the independent pharmaceutical colleges from their old-time condition of dependency on the medical college was in the nature of a natural and well-grounded protest against the inadequate and unfit instruction obtainable under this arrangement. The pharmacist being looked upon in the light of "the physician's cook," was not given any special instruction whatever, but merely allowed to garner the stray crumbs of learning dropped from the intellectual board of the student of medicine. This breaking away has served a most excellent purpose in several directions.

In the first place it has enabled the practical pharmacist to determine by untrammelled experiment the curriculum best suited for the actual present needs of his calling without any of that prejudice of scholasticism which is so apt to abound in purely literary institutions.

The lines of this curriculum have been determined by the conditions which the student is to meet. They are based on facts rather than on theories, and have that wholesome substantiality which is the concomitant of such a basis. These schools of pharmacists have been built up strongly and solidly. They give the practical knowledge acquired in the calling as it exists now.

The prime object of the secession of the pharmaceutical school from the medical school has been nearly, if not quite accomplished. It is now generally conceded that the pharmacist requires a special schooling along different lines than that of the physician. This having been accomplished, is it not time to consider whether an association of the college of pharmacy with the university will not be conducive to the best interests of pharmaceutical education at large?

The large practical experience gained as independent institutions, and the self-reliance resulting therefrom, would be of immense value on consolidation in guarding against the introduction of a too impractical scholasticism by the university element. The practical autonomy of the school of pharmacy should be assured, and the authority should be, as it now is in most independent schools, vested in a sufficiently large body of pharmacists to insure its being truly representative.

The time may still be far distant when the independent pharmaceutical schools will have been merged into universities and even then the affiliation with the university may in some cases be almost nominal, but the earnest student of educational affairs can see that this consolidation must come if the best and highest practicable pharmaceutical education is to be attained.

## FAKE FORMULAS.

THE soda water syrup industry has given rise to the publication of a great many books of formulæ which purport to give recipes for the preparation of new flavors and syrupy compounds. That only a few of these publications are of any value, and that many are utterly worthless, is happily becoming known to those who have occasion to use them.

In writing thus we have in mind two widely advertised books which have

found sale at prices far above their real value. Of one of these a valued correspondent in Saratoga Springs writes as follows :

Our disappointment with the work is so great that we respectfully request you to allow us to return the book and receive the credit to apply on your estimable journal. To pay \$5 in the year 1894 for formulas of "Lemon Syrup" reading :

Oil of lemon.....1 dram  
Syrup.....1 gallon

Why, a boy with a year's experience knows better than to be fooled by that. Then as to "Ginger Ale" we are told to take

Ginger ale extract .....6 ounces

No formula for ginger ale extract is given which makes it easy for us to understand why—endorse the book.

Lack of time and anger are our excuses for not inflicting you with a more lengthy effusion ; you, however, get an insight into how one feels who has been bit.

We have always endeavored to keep our advertising pages free from the announcements of doubtful concerns, and are always happy to have our efforts in this direction seconded by the advice and encouragement of our readers. A further service can be rendered by every reader who will patronize the firms who are now represented in our pages.

## LEGALITY OF CERTAIN OBNOXIOUS FORMS OF TAXING BUSINESS.

THROUGHOUT the length and breadth of the land, though more particularly in some sections of it, there seems to be almost a mania for unduly taxing business. It is manifested in various forms of statutes, ordinances and license laws. The explanation of this is, perhaps, to be found either in the belief that commercial and manufacturing enterprises are possessed of the means to do it, and therefore ought to bear the expenses of government, or in the still narrower notion that by imposing heavy taxation is the way to "protect" local tradesmen and interests from the encroachments of outside merchants and rapacious corporations.

The interests thus assailed are awaking to the importance of thwarting this movement to bleed or cripple them, and, in order to protect themselves from illegal and unjust discrimination, present and prospective, they are beginning, individually and unitedly, to resist all questionable impositions, regardless of the immediate expense of so doing. In St. Louis, for example, as has already been widely advertised, there has recently been formed an association of business men, notably of the Merchants' Exchange, the Wholesale Grocers' Association, the Paint, Oil & Drug Club, the implement dealers, and the other wholesalers of the city. The object of this organization is to prevent, or thoroughly test, all obnoxious legisla-

tion of this character, wherever encountered.

Now what is the constitutional law on this subject. It is well settled that a State has the inherent right to tax its subjects and such property of others as it protects. This includes the power to require licenses for the various pursuits and occupations carried on within its limits, and to fix their amount. It may also license some and exempt others. When, however, the business or occupation consists in the sale of goods, the license tax required for its pursuit is in effect held to be a tax upon the goods themselves, and will not stand if the latter would not. The importance of this last principle cannot be overestimated.

Any thing savoring of State or municipal taxation of interstate commerce is illegal, according to the decisions of the Supreme Court of the United States. It holds that no State can levy a tax on interstate commerce in any form, whether by way of duties laid on the transportation of the subjects of that commerce, or on the receipts derived from that transportation, or on the occupation or business of carrying it on. Its latest decision on the subject is that any regulation as to the manner of sale, whether by sample or not, whether by exhibiting samples at a store or at a dwelling house, is a regulation of commerce, and that it is as much a burden upon commerce to tax it for the privilege of selling to a minister as it is for that of selling to a merchant. Any manufacturer of goods which are unquestionably legitimate subjects of commerce, who carries on his business of manufacturing in one State can, therefore, send an agent into any other State to solicit orders for the products of his manufactory without paying to the latter State a tax for the privilege of thus trying to sell his goods. Even should a license in terms be declared to be exacted as a police regulation, that fact will not, of itself, justify it, for whatever may be the reason given to justify the power invoked to sustain the act of the State, if that act is one which trenches directly upon that which is within the exclusive jurisdiction of the national government, it cannot be sustained.

It is also to be noted that this court says that of the power of a State to impose a license tax upon a general business, such, for instance, as a general commission business not acting for any particular firm within or without the State, there can be no question.

Concerning city and village license laws on other than interstate business, it is enough to say that one who solicits orders for future delivery, or who delivers goods previously sold by another is not a peddler within the purview of an ordinance requiring the latter to have a license. Nor does the use of samples in taking the orders alter this.

## A NEW ANTISEPTIC.

THE AMYKOS ASEPTIN CO. of New York are sending out a remarkable collection of statements and formulas concerning a new antiseptic substance which they have burdened with the strange and remarkable title, "Amykos Aseptin." The pamphlet is prefaced with a quotation from Sir Joseph Lister reading:

" \* \* \* Here then I had at once sufficient evidence that this new antiseptic was highly efficient \* \* \* "

A foot note tells the reader that this quotation is taken from Sir Joseph Lister's treatise on Amykos Aseptin. The treatise alluded to is presumably a private publication, discovered by the Amykos Aseptin Co. among the papers of the eminent Professor, since no record of Sir Joseph Lister's researches into the value of this particular compound is found among his published papers. The therapeutic range of the substance is wide and varied beyond ordinary comprehension; and its quality of compatibility is equally astonishing. It is prescribed in all sorts of combinations, in one mixture with acids and in another with alkalies. Some of the quoted formulas would lead the reader to credit Amykos with some mysterious properties, many of them being notorious examples of incompatibilities—others are amusing from the quaint orthography employed. This one, for example, betrays the writer's weakness in the matter of pharmacopoeial synonyms, as well as his natural tendency to prescribe the proprietary articles of friendly nostrum dealers:

Vaseline or Cosmoline.....3j  
Liquor of Pici's Alkalines.....3ij  
Amykos Aseptin q. s. ft.....3iv

## OUR QUIZ BOX.

THE establishment of the students' department, which we have conducted under the name of the "Quiz Box," was somewhat of an experiment. The interest has been so wide spread and the good done so general that we feel warranted in continuing its publication after the close of the present series in this issue. It is not alone those who have sent in replies to the queries propounded who have benefited by this department. We have been given the most ample assurances of this from our readers all over the United States and Canada, and we feel it our duty to continue the good work so well begun in the earlier portion of the year, and trust that the contestants who have manifested their interest throughout the present contest will take part in the future contest, and that their number will be very largely augmented. The character of the prizes to be offered is stated in the quiz column.

Written for the  
American Druggist and Pharmaceutical Record.

## Notes on Formulæ.

BY GALEN JR.

### CATARRH CURES.

Quite a demand has lately sprung up for certain catarrh cures owing their virtues to boric acid and menthol. These preparations are much more meritorious than the ordinary catarrh snuffs. One of the best compounds of this kind is made as follows:

Boric acid, powdered..... 1 ounce  
Powdered sugar..... 4 ounces  
Menthol..... ¼ dram

M.—Sec. arte.

This makes an elegant and excellent catarrh powder and will be found excellent in fresh colds as well as in catarrh.

Some formulæ of French origin, which have received the approval of physicians, are also given:

Betol, in fine powder..... 3 iss  
Menthol, in fine powder..... gr. xv  
Cocaine, in fine powder..... gr. vi  
Coffee, in fine powder..... 3 ss

Mix.

Salicylate of bismuth..... 3 vi  
Camphor..... 3 ss  
Hydrochlorate of cocaine..... gr. i

Mix.

The following pomade is also useful for applying to the nostrils:

Menthol..... gr. i to gr. iv  
Boric acid..... 3 iss  
Vaseline..... 3 x

Mix.

### SYRUP FOAM.

One of the nicest and cleanest foams for soda syrup the writer has ever used is gelatine. The brand known as Cox's will be found excellent. It has the advantage of ease of preparation and does not seem to interfere with the keeping qualities of the syrup, while the foam produced is all that could be desired. It has many points of superiority over soap bark or egg albumen.

### SYRUP COLORING.

In coloring either orange syrup or strawberry red, nothing is perhaps equal to a good black raspberry juice. It makes a nice color and is unobjectionable in every way.

### ORANGE SYRUP.

One of the soda fountain syrups somewhat difficult to make of satisfactory flavor is orange; for the last few years we have used the following formula and have always succeeded in preparing an elegant syrup.

Take six good oranges and rub the oil from the rind by means of cut, loaf sugar. After doing this the juice of the oranges is squeezed into about 4 or 5 pints of foamed stock syrup. The sugar used to extract the oil is placed in syrup and the whole heated gently to dissolve the sugar; then strain. If desired for blood orange color with raspberry juice or tincture of cudbear. The rind will readily give up its oil to the sugar, then add foamed syrup to make 1 gallon. In case the oranges are unusually sweet acidify with citric.

### SOLUTION OF ACID PHOSPHATES.

A nice solution of acid phosphates can be quickly and easily made by taking

Phosphoric acid, 50 per cent..... 32 troy ounces  
Prec. carb. calcium..... 6 ounces  
Calcined magnesia..... ¼ ounce  
Potass. carbonate..... ¼ ounce  
Distilled water enough to make. 1 gallon

To the acid add gradually and in small amounts the calcium carbonate; when all is added add magnesia and stir thor-

oughly. Then dissolve the potassium carbonate in 9 ounces of water and add gradually to the acid solution, then dilute to one gallon, allow to stand an hour or so and filter. For most of the uses of an acid phosphate dilute phosphoric acid will be found just as satisfactory and much more economical. But either can be used and will give satisfaction.

### RIGA BALSAM.

In some sections of the country there is a demand for a preparation known as Riga Balsam. It is much used among certain foreigners as an embrocation. The preparation usually dispensed for the article named is made as follows:

Oil juniper wood..... 2 ounces  
Tr. benzoïn. comp..... 2 ounces  
Alcohol to make..... 1 pint

M.

This formula gives uniform satisfaction and is an excellent embrocation.

### RAZOR PASTE.

Among the articles easily made and in which a trade can be builded up is a good razor paste. This can be easily made by taking emery flour and shaking up with water and allowing to stand a moment to allow the coarse particles to subside, then pour off the remainder in a paper filter and allow it to drain and dry. When dry mix with enough petrolatum to make a paste. This is an excellent preparation for the purpose, and it is easily and cheaply made.

### FINGER NAIL POLISH.

One of the finest polishes for finger nails is the stearate of tin. It is much superior to the oleate, being stiffer and thus nicer to use. It is easily made by precipitating a stearate of soda or potash in solution by a soluble salt of tin in solution, washing the precipitate thus formed and drying. This can be tinted with carmine and will be found excellent. If a cheaper preparation is desired, it can be mixed with equal parts of zinc oxide.

### ELIXIR CALISAYA WITH PHOSPHATES.

An article that has had a large sale and one that seems to be based on its virtues as a tonic is a proprietary Elixir Calisaya with the phosphates. This preparation can be duplicated in every essential part by mixing equal parts of Elixir Calisaya, N. F., made from the alkaloids, and U. S. P. syrup of lactophosphate of calcium, and coloring with tincture of cudbear.

### How to Make Ice.

To procure ice in the laboratory, even when intended to illustrate the same as an experiment, is generally brought about either by the clumsy method of mixing large quantities of the original compound with sodium or calcium chloride, and exposing to its influence the substance under examination; or when in larger quantity, by employing one of the costly refrigerators now upon the market. With a practical chemist, according to H. N. Warren, all such apparatus is ridiculed. Take for the expensive refrigerator a fractional distillation flask; place the flask in the desired quantity of water which is intended to freeze, contained in a suitable receptacle. Through the neck of the flask is now inserted a rubber tube terminating in a glass point, which should all but touch the surface of the liquid contained in the flask, which consists of about 20 cc. of an equal mixture of ether and carbon disulphide. The further end of the rubber is now connected to a pair of constant bellows, and a brisk current of air continued for about three minutes; almost immediately the thermometer will sink to zero.

## The Cutter and the Remedy.\*

BY J. H. REDSECKER,

Lebanon, Pa.

The druggist, dealing as he does in medicines and medical appliances, seems to be the natural channel for the distribution of proprietary remedies. The retail prices of these goods are fixed by the manufacturer and the public have willingly paid the established prices without murmur or complaint. When we remember that many of them are slow sellers, that they must be kept and are often dead stock on the dealer's hands, the margin of profit they have afforded was none too much. Within recent years, however, the cutting of the prices of these preparations has been inaugurated, and that it has been an injury to the trade is beyond question, as druggists have been compelled to handle this class of goods without any margin of profit whatever.

That there must be legitimate profit in all business will be readily admitted, for without it the business man could not live, pay his clerks, his taxes and the obligations he owes to his family. When some of our inventors succeed in discovering a way by which we may dispense with the "butcher, the baker and the candlestick maker," not to say other necessary craftsmen, may we hope to do business without profit and sustain life.

Various plans have, from time to time, been proposed to prevent cutting in prices of these so-called patent or proprietary medicines, but thus far without producing the desired results. To suggest a remedy now seems almost a hopeless task. The old adage "that fools rush in where angels fear to tread," may find a parallel in the task I have undertaken in proposing a remedy for this evil of cutting.

We are assured by our friends, the wholesale dealers, that even with a margin of ten per cent. profit which the rebate system gives them on this class of goods, they are handling them at a loss; and we do not doubt their statements. If this be so when the sales run up into the tens of thousands of dollars and where a margin of ten per cent. yields quite a large return, how much greater is the loss of the retailer whose sales are but small and who is compelled, through this cutting of prices, to sell them at actual cost? You may ask why does he handle them? Simply because he is compelled to do so. People come to his store for them, and when there possibly purchase something else. If he does not keep them, they will not come to his place at all and the trade he may have in other lines of legitimate pharmacy, will be lost to him. Hence he keeps them, not from choice, but from necessity.

That the many plans proposed to overcome this evil have not been successful, is due to several causes, not the least of which is the indifference of some of the manufacturers, if not their quiet encouragement of the cutters, for no matter at what price the goods are retailed, they get their full prices for them. Then, too, we have some of the jobbing trade who are only too glad, despite all efforts to the contrary, to supply the cutter in the hope of securing his general trade and thereby making some profit out of him.

That many of these preparations are worthless, not to say harmful, is unquestioned, and that by skillfully worded

\* Read at the meeting of the Pennsylvania Pharmaceutical Association, Reading, Pa., June 12, 13 and 14, 1894, and communicated by the author.

advertising they lead to many imaginary diseases and injurious dosing of the system, is an indisputable fact. There is no doubt the general health of the public would be improved were there a disuse of these patent nostrums, many of which are compounded by persons who have no medical or pharmaceutical knowledge, and a return to the old practice of consulting an intelligent physician and following his advice.

Instead of making our stores the repositories for the thousand and one nostrums of which we know absolutely nothing, the abolition of them would relieve us of much unemployed capital and bring back pharmacy to its legitimate channel and be a positive benefit to the pharmacist, the physician and the public.

It is my purpose to present two propositions for the cure of this cut-rate evil, and whether you agree with me or not, if I but set you to thinking, and eventually to acting, I shall have accomplished something and the preparation of this paper will not have been in vain.

First: We should endeavor by national legislation, to so amend our trade mark law as to give no proprietorship in medicines or medical preparations. I believe this is the case in France. When this is done we will not have any one adopt fanciful names for old and well-recognized preparations, and endeavor to prevent their manufacture by others. Nor will we have two or three well-known chemicals combined, and foisted on the public at a price twenty times their actual cost. A patent covers a period of fourteen years, but a trademark, like Tennyson's brook, goes on forever.

My second proposition, is to secure, by State legislation, the enactment of a law making it an offense, punishable with fine and imprisonment, or either or both, for any person to sell or offer for sale, any so-called patent or proprietary remedy, the sworn formula of which is not registered with the Secretary of the State Pharmaceutical Examining Board, which shall be open to inspection, unless such preparations, under certain restrictions, are prepared by a citizen, registered under the State Pharmacy Law. When we have legislation such as is here indicated, may we hope to place pharmacy where it properly belongs, and we shall have the dawning of a new era for the pharmacist and a benefit to the public which they will learn to appreciate more and more as the years roll round.

The following is the text of a State law, such as I have outlined:

#### AN ACT

To prevent the sale of so-called patent or proprietary medicines within the State of Pennsylvania, unless the formula of the same is registered with the Secretary of the State Pharmaceutical Examining Board.

SECTION 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met and it is hereby enacted by the same, That it shall not be lawful for any person or persons whatsoever, to sell or offer for sale within this Commonwealth any secret nostrums, proprietary or so-called patent medicines, unless the formula of such preparation or preparations, duly attested under oath, be first registered with the Secretary of the State Pharmaceutical Examining Board, who shall receive a fee of twenty-five dollars for each registration, one-fifth of which shall be for the use of the said Secretary, as compensation, and four-fifths for the use of the said State Pharmaceutical Examining Board, *Provided*, That nothing in this Act shall prevent any pharmacist, who is a resident of the State, and registered under an Act, entitled "An Act to Regulate the Practice of Pharmacy and Sale of Poisons, and to Prevent Adulterations in Drugs and Medicinal Preparations in the State of Pennsylvania," approved May 24, 1887, and its several amendments, from preparing and selling any remedy or remedies, the sales of any one of which do not exceed five hundred dollars per year.

Sec. 2. Nothing in this Act shall prevent any person or persons from manufacturing or selling any proprietary or so-called patent medicine when the same is shipped outside of this Commonwealth.

Sec. 3. Any violation of any of the provisions of this Act shall be a misdemeanor punishable by a fine not exceeding five hundred dollars, or imprisonment not exceeding one year, or either or both, at the discretion of the Court. And it shall be the duty of any public prosecutor in any county of this Commonwealth to see to the enforcement of this Act.

Sec. 4. This Act shall go into effect on the first day of January next succeeding its passage.

Sec. 5. Any Acts or parts of Acts inconsistent therewith are hereby repealed.

## Pharmaceutical Progress.

**Poisoning by Eucalyptus Oil.**—Dr. Neale reports (*Australasian Med. Gaz.*) a case of fatal poisoning by oil of eucalyptus; also, several cases wherein profound toxic effects were induced by the same drug, but with ultimate recovery.

**Thermodin.**—Prof. Schmitt, of Nancy, gives it as his opinion (*Nouv. Rem.*, No. 9) that thermodin is a perfectly safe antipyrretic of uniform but mild action, which is slow in taking effect, but lasts tolerably long. Its anodine effects are practically nil.

An Improvement in gas generating apparatus consists of having the short tube which conducts the gas out of generating flask closed at the lower end and with openings on the side. This prevents the accidental stopping up of the outlet tube, which occasionally happens with the other tubes.

Lactol or lactophenol is a compound of lactic ether of naphthol and is analogous to benzonaphthol. It is tasteless, and is decomposed on ingestion into lactic acid and naphthol, and seems fitted for therapeutic use. According to Cocq (*Rundschau Prag*) it may be administered in doses of 1 gramme [15.5 grains] daily during a long period without evil results.

Anytyle is the name given to a class of bodies (phenol, hydrocarbons, ethereal oils, camphors, etc.) which are themselves insoluble in water, but which became soluble by admixture of so-called "Anytin." This latter substance is found by the action sulphuric acid on various mineral oils, resin oils, and similar hydrocarbons. It is said to be an energetic disinfectant.

**Tincture of Iron Chloride in Scalds and Burns.**—Dr. Starr states that where the cuticle, is gone in scalds or burns, the official tincture diluted with half to a third as much water will, applied immediately, not only allay pain but will prevent blisters. An ointment made of one part of the tincture of iron and eight parts of petrolatum or lard, makes, when spread on a soft cloth, an admirable dressing for old sores left by burns.

**Salol coating for Pills.**—Oeder (*Berl. klin. Woch.*, Brit. Med. Jour.), has made a number of experiments with pills coated with salol, and containing a small quantity of methylene blue. For the purposes of coating, the salol is gently heated to its melting point. The pills were soluble in various oils in one to two hours, and in pancreatic extract in ten hours. One hundred and fifty-two such pills were given to patients, and in no case were they found in the stools. In another series of experiments carried out on himself and a volunteer, the author shows that the salol coating is first dissolved in the duodenum. A coating of 0.02 to 0.03 salol suffices to prevent the pill from being crushed by the pressure of the tongue against the palate. The pills must not be bitten. They should be kept in a cool place, and they should not be taken with substances such as oil or hot food stuffs

which are likely to dissolve the coating. An hour after food is the best time for administration.

**Antiseptic Powder.**—Dr. A. Pick says the following formula has given him very satisfactory results in all cases where iodoform is ordinarily employed:

Corrosive sublimate.....	1 grain
Boric acid.....	1 ounce
Tannic acid.....	10 grains
Milk sugar.....	sufficient for 2 ounces

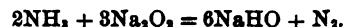
$\frac{1}{2}$  grain of corrosive sublimate, in this mixture, gives a 1:5000 trituration of bichloride, and 1 grain, one of 1:1000.

The sublimate should be mixed very gradually and thoroughly with the milk sugar, the other ingredients being slowly added one by one, in order to obtain a uniform distribution of the bichloride.

**Estimation of Urea.**—Of the many methods of estimating the amount of urea in urine, the following, by Dr. Charles Doremus of New York, is said to be the most practical. A curved tube, similar to the saccharometer of Einhorn, is filled to the bulb with a known solution of hypobromite, and then with a pipette the urine is slowly introduced. Rapidly the urea is decomposed and the nitrogen fills the upper end of the tube, displacing the urine into the bulb. When the action has ceased, the graduations show the number of grams or grains of urea to the cc. or oz., then, by knowing the amount of urine passed during the twenty-four hours, the daily amount of urea is easily found.

**Preserving Fresh Milk.**—The Villon process of treating fresh milk for transportation or domestic preservation is attracting a good deal of attention abroad, and seems to have solved the problem in a very satisfactory way. The milk is treated in 100 liter (25 gallon) lots, as follows: As soon as it is taken from the cows it is cooled down to 15° or 16° C. in the metal containers in which it is to be shipped. Oxygen alone or oxygen mixed with carbonic acid gas, is then driven into the vessel under pressure of two atmospheres. When the requisite quantity of gas has been admitted the turn of a screw hermetically closes the vessel, and the milk is ready for transportation. It will, when thus prepared, keep for many days without souring, or altering in any manner.

**Ammonia and Sodium Peroxide.**—When sodium peroxide is treated with dry ammonia gas it at first turns yellow, and a small quantity of oxygen is given off. It then fuses, becomes brown, and froths up giving off at the same time large volumes of practically pure nitrogen. Caustic soda, sodium nitrite and nitrate are found in the residue, and the main reaction is according to the equation



Michel and Grandmougin have made a study of this, and also the action of ammonia on other peroxides. With the barium compound no nitrite or nitrate is produced; manganese peroxide is reduced to  $\text{Mn}_2\text{O}_3$  with liberation of nitrogen and water, and with lead peroxide ammonium nitrate and nitrite and nitrous fumes are produced.

**Action of Chloroform.**—J. V. Laborde (*Bull. de l'Académie de Médecine*) has endeavored to demonstrate experimentally that the primary accidents of chloroformization, such as the arrest of the heart and respiration, are due to an essential, predominant action of the drug exercised on the peripheral ends of the sensitive nerves



of the nasal mucous membrane, that is, upon the terminal fibers of the trigeminal. The author has heretofore shown that the vapor of chloroform applied to the nose of a rabbit, or touching the nasal mucous membrane with a sponge charged with the anæsthetic only produces a special irritation locally. As a consequence of this, there is an immediate stoppage of the lever that is recording the cardiac and perspiratory movement. On the other hand, if the nasal mucous membrane is rendered non-sensitive by the application of a local anæsthetic like cocaine or a general one like opium or morphine; or, again, if section of the trigeminal is practiced beforehand, then the arrest of the heart and respiration no longer takes place.

**Detection of Iodates in Alkaline Iodides.** Matteo Spica, (*Gazz. Chim. Ital.*) proposes to utilize the fact that while barium iodate requires 1736 parts of water to dissolve it at 150 C., barium iodide is very soluble in water or salt solution. Dissolve 1 gramme of potassium iodide in 5 cc. of water and add a small quantity of barium chloride solution. If as little as 0.002 per cent of iodate be present a granular precipitate will be thrown down which is insoluble in ten times the original volume of water, and is also insoluble in diluted acetic or hydrochloric acid, but which dissolves on the addition of concentrated sulphuric acid if warmed. If the precipitate dissolves in acetic acid with effervescence the presence of a carbonate is indicated. If an insoluble precipitate remains after treatment with acetic acid in the cold the addition of warm acetic acid will disclose whether or not it is an iodate or a sulphate. This one test, therefore, answers for all three impurities. It has the advantage over the tests laid down in the Pharmacopœias that it is less liable to error through decomposition or impurity of the reagents.

**Cheledonium Majus**—According to Orlow, *Apotheker Zeitung*, cheledoxanthin is best obtained from the plant in the following method: The acidified watery extract is precipitated with picric acid, and the precipitate is washed with dilute alcohol and then warmed with ammonia to set free the picric acid. The residue of this is then dissolved in weak hydrochloric acid and precipitated with strong solution of potassium iodide. The resulting compound is washed with cold water, weak ammonia, and ether successively, and then crystallized from alcohol or hot water. The cheledoxanthin obtained by this process forms a dark yellow powder or brownish crystal of bitter taste. By heating, it carbonizes, and a fluid distillate is obtained, a portion, however, subliming unchanged. It is easily soluble in alcohol and weak acids, slightly so in water, and insoluble in ether. It contains nitrogen, and behaves in most respects like an alkaloid. It is certainly not a glucoside. With strong sulphuric acid and vanadic acid it gives a red color, with potassium bichromate it gives a green, and with molybdic acid no color. It occurs in the plant in the proportions of from .005—.01 per cent., and is most abundant when the plant is in bloom; in early spring the plant contains no cheledoxanthin.

**Simple Process of Bronzing.**—The very pretty artistic effects that are obtained from galvanic bronzing cause this process to be highly esteemed by manufacturers; but it requires apparatus that one does not always have at hand. Mr. Mandit, of Caen (*Le Genie Civil*), has recently made known a very simple formula, which is capable of giving every tone, from that of Barbedian bronze to

antique green, according to the length of time that the copper is allowed to remain in contact with the liquid. Its very simplicity will cause it to be appreciated by those interested.

After the piece has been well scoured it is covered with the following mixture by means of a brush:

	Parts.
Castor oil.....	20
Alcohol.....	80
Soft soap.....	40
Water.....	40

The piece, left to itself for twenty-four hours, becomes bronzed, and if the duration of the contact be prolonged, the tone changes. An infinite number of tones, pleasing to the eye, may thus be obtained. The drying is finally effected with hot sawdust, and it then only remains to coat the piece with a colorless varnish, greatly diluted with alcohol, in order to obtain an eminently satisfactory result.

**Poisoning by Benzine.**—Rosenthal (*Brit. Med Jour.*) reports a case in a girl aged 1½ year. The quantity taken was uncertain. When seen, ten to fifteen minutes afterwards, the child was in a condition of stupor, with half-open eyes. The radial pulse was small, frequent, and subsequently could not be felt. Respiration 60 to 70. A tube was passed through the nose and the stomach washed out. The water used for the washing smelt strongly of benzine and contained blood stained masses of mucus. In about six hours the child had considerably improved, and subsequently recovered completely. The treatment of benzine poisoning should consist in washing out the stomach as soon as possible, as benzine is rapidly absorbed. If the breathing fails artificial respiration should be practised. Benzine is not identical with benzol, but is a mixture of hydrocarbons, especially hexan and heptan. Sometimes benzine poisoning is caused by inhalation. The author refers to a case of an alcoholic who took to inhaling benzine in place of drinking.

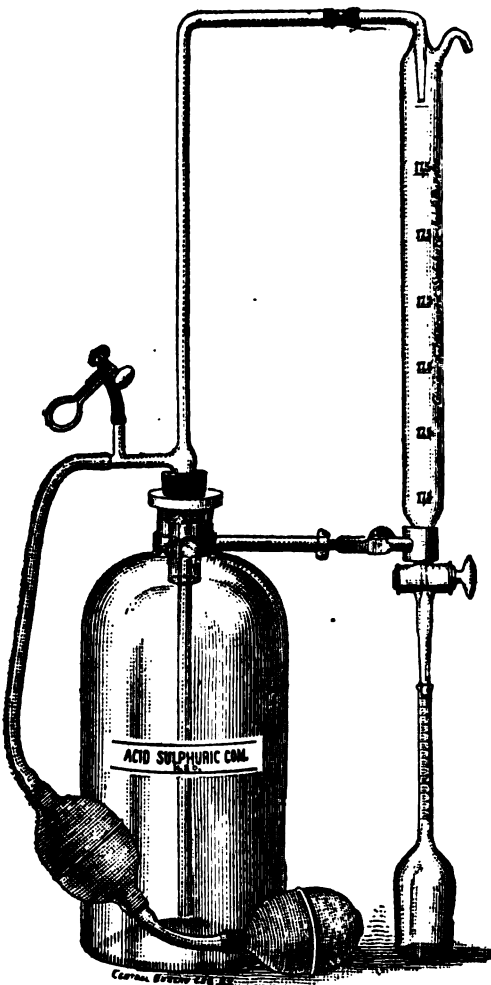
[Cases of benzine intoxication have been observed in hospital laboratories where the manufacture of iodoform gauze is carried on. On the large scale iodoform gauze is made by dissolving the iodoform in a hot solution of benzine and castor oil and saturating cheese-cloth with the mixture.]

**Identity Tests for Lemon and Orange Peel.**—E. G. Clayton states (*Analyst*) that when orange peel is moistened with strong hydrochloric acid, its color changes from yellow to a rich dark green; lemon rind, similarly treated, retains its hue, or, at most, assumes a dingy, yellowish-brown tint. A convenient and simple chemical test, therefore, which will distinguish between small fragments of lemon and orange peel is to touch them with a glass rod previously dipped in hydrochloric acid. The diluted acid will answer the purpose, but the reaction is slower. A few minutes' exposure to hydrochloric acid gas will effect this change in the pigment of orange peel. The color of lemon rind is unaffected. The shades of green developed by dilute hydrochloric acid are deepest in the cases of Mercia, Denia, and Florida oranges; of moderate intensity with Jaffa and "blood" oranges; and feeble with Valencia and Tangerine oranges. This statement also applies to the reactions with strong hydrochloric acid, excepting that the color of Tangerine orange peel with the strong acid is perhaps more intense than that observed with any of the other varieties of the fruit. The peel of the lime behaves, with hydrochloric acid like lemon rind. It was

remarked in the discussion which followed that it was not at all an infrequent occurrence for lemon and other peels to be artificially colored. He thought that at present too implicit reliance should not be placed on this test in the case of candied peel.

### Sulphuric Acid Burette.

This is especially adapted to measure quickly and accurately the sulphuric acid for the Babcock milk test. In using this burette it is simply necessary to take out the glass stopper of the acid bottle and insert the rubber stopper through which the syphon tube is put, then attach the clamp to the neck of the bottle and fasten the burette into same. Connect the burette to the syphon tube by a small piece of pure gum tubing, attach the



rubber bulb and pinchcock as shown in cut, and the apparatus is ready for work. By compressing the end rubber bulb several times the acid is forced into the burette and pumping is carefully continued until the acid has just reached the top mark on the burette, when the pinchcock on the side of the syphon tube is opened by pressing, and the excess of acid will flow back into its bottle and the acid in the burette will remain exactly at the top mark and measuring can begin at once.

Care should be taken not to pump too forcibly, but just enough to make the acid flow into the burette to the top mark, and the moment the acid should pass this mark to open the pinchcock at once. When one acid bottle is emptied this apparatus can be attached to the next bottle and so on. It is designed by Emil Greiner of New York city.

### Extract from the Sixth Edition of Diederich's Pharmaceutical Manual.\*

#### Koumiss.

Compressed yeast..... 0.5 grammes (7½ grains)  
Water..... 60.0 grammes (2 fl. ozs.)  
Sugar..... 4.0 grammes (60 grains)  
Milk sugar (granular)..... 7.0 grammes (105 grains)

Stir the yeast with the water with a horn spoon, pour into a strong bottle of about 400 cc. or 18 ounces capacity, add the sugar and milk sugar and fill with cows' milk which has been previously boiled and cooled. Stop up the bottle, tie the cork down and shake well, then lay the bottle for six hours in a warm place and then put in a cold place in the cellar for forty-eight hours. The koumiss will then be ready for use and should be shaken before using.

#### Lanolimentum Boroglycerini.

##### LANOLIN BOROLYCEERIDE.

Olive oil..... 5 grammes (75 grains)  
Lanoline..... 70 grammes (300 grains)  
Paraffin salve..... 65 grammes (965 grains)  
Boroglycerin..... 5 grammes (75 grains)  
Rose oil..... 2 drops

Mix and stir to a creamy consistence.

#### Dressing, Varnish and Dubbing for Leather.

Leather dressings are intended to replace shoe polish, over which they have the advantage that no brushing is required in order to make them shine. They differ from varnishes in that the coating which they give possesses a considerable degree of elasticity and pliability.

Leather varnishes are alcoholic solutions of resins which are intended to impart a polish to leather which has a certain amount of stiffness.

Leather dubbing is intended to render the leather soft and pliable. Simple as this appears one nevertheless very generally finds the most ill-suited fats directed in formulas for leather dubbing.

#### LEATHER DRESSINGS.

Some of these have a high polish and others have a dead finish. The latter are oleagenous solutions of wax in various colors. Dressings with a high polish are only useful in black.

#### DRESSINGS WITH A DULL FINISH.

##### YELLOW.

	Parts.
Yellow wax.....	100
Fish oil.....	100
Benzine.....	730
Spirits of soap.....	50
Gold or yellow ochre.....	20

##### BROWN.

	Parts.
Yellow wax.....	100
Fish oil.....	100
Benzine.....	730
Spirit of soap.....	50
Brownumber.....	20

##### BLACK.

	Parts.
Yellow wax.....	100
Fish oil.....	100
Benzine.....	740
Spirit of soap.....	50
Lampblack.....	10

Melt the wax with the oil, add the benzine gradually and finally the spirit of soap, then mix the coloring matter which has been previously rubbed to a smooth paste with some of the oil.

#### BLACK FRENCH DRESSING WITH HIGH POLISH.

	Parts.
Shellac, light colored.....	100
Borax.....	50
Water.....	675
Sugar.....	100
Nigrosin.....	25

\*Translated for THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD.

Heat the shellac, borax and water together stirring briskly in a steam bath until complete solution is obtained. To this add the other ingredients and stir until nigrosin is completely dissolved, finally add enough water to make the whole up to 1,000.

The directions should read as follows:

*Harness, shoes and other leather goods should be thoroughly cleaned by washing with soap and water, allowed to dry and then coated with this dressing by means either of a brush or of a sponge.*

#### Leather Varnishes.

##### YELLOW.

	Parts.
Shellac, light.....	50
Sandarac.....	50
Mastic.....	50
Larch turpentine.....	20
Castor oil.....	5
Oxalic acid.....	5
Alcohol.....	sufficient to make 1,000

Dissolve the solid in 825 parts of alcohol by maceration, filter and add sufficient 90 per cent. alcohol to bring the whole up to 1,000 parts by weight.

Yellow leather varnish is useful for painting yellow leather harness and fittings. If the harness has been used it should be cleaned with benzine before the dressing is applied, the oxalic acid intensifies the yellow color. By rubbing a couple of times a polish is obtained.

#### RED RUSSIA-LEATHER VARNISH.

	Parts.
Sandarac.....	100
Mastic.....	50
Larch turpentine.....	20
Elenic (soft).....	5
Castor oil.....	5
Birch tar oil.....	10
Fuchsin.....	5
Alcohol, 90 per cent. sufficient to make.....	1000

Dissolve the gums and the castor oil in 850 parts of alcohol by maceration and then add the birch oil and the fuchsin and finally sufficient alcohol to make 1,000 parts.

The above may be applied to yellow leather which has previously been deprived of grease by means of benzine with a view to imitating russia leather.

#### BLACK MILITARY VARNISH.

	Parts.
Shellac, brown.....	150
Rosin.....	50
Soap shavings.....	30
Larch turpentine.....	10
Rosin oil.....	10
Nigrosin, alcohol soluble.....	15
Alcohol.....	850

Dissolve in the alcohol by aid of a gentle heat and strain through cotton.

#### DEAD BLACK LEATHER VARNISH.

	Parts.
Shellac, brown.....	200
Soap shavings.....	40
Larch turpentine.....	20
Yellow wax.....	20
Nigrosin, alcohol soluble.....	10
Lampblack.....	10
Alcohol, 95 per cent., sufficient to make.....	1,000

Dissolve the soap, wax and rosin in 800 parts of alcohol by maceration at 70° C., add the nigrosin to the hot solution, allow to cool, and strain through gauze. Rub the lampblack up well with a small quantity of the solution and then add this to the whole. Finally add sufficient alcohol to make up to 1,000 parts.

#### BLACK HARNESS VARNISH.

	Parts.
Shellac.....	125
Soap shavings.....	25
Larch turpentine.....	25
Yellow wax.....	15
Nigrosin alcohol, soluble.....	25
Glycerin.....	20
Alcohol, 95 per cent., sufficient to make.....	1,000

Dissolve the shellac and soap in the 800 parts of alcohol by maceration. Melt the turpentine and wax together and add the shellac solution to the molten mass in divided quantities with constant stirring. Rub the nigrosin to a smooth paste with the glycerin, add to the solution and finally add sufficient alcohol to bring the whole up to 1,000 parts.

Instead of the aniline coloring matter 50 parts of lampblack may be substituted, but if used, care should be exercised to rub to a smooth paste with a small proportion of alcohol before adding it to the balance of the varnish.

The directions should read as follows:

*Clean the harness or article to be varnished with a warm solution of soft soap (sapor vindis), in water or with a mixture of 3 parts alcohol and 1 part ammonia, allow to dry thoroughly and then apply the varnish with a soft brush. When dry brush with a dry brush.*

#### Leather Dubbing.

##### BLACK DUBBING.

	Parts.
Yellow wax.....	4
Oil of turpentine.....	16
Soap shavings.....	5
Fish oil.....	65
Lampblack.....	10

Melt the wax carefully with the turpentine, add the fish oil in which the lampblack has been previously well mixed, lastly add the soap and heat in a bath until dissolved and finally stir until cold.

##### YELLOW DUBBING

Follow the preceding formula except as regards the lampblack, for which substitute the following: Dissolve 5 parts of finely powdered borax in 95 parts of refined glycerin by the aid of heat, add 25 parts of yellow ochre and incorporate this in the oily mass as above.

##### CLEAR OR COLORLESS DUBBING.

(For reins, driving belts, etc.)

	Parts.
Fish oil.....	500
Beef tallow.....	300
Cocoonut oil.....	100

Melt together.

### Salol and Adeps Lanæ in the Pharmacopœia.

Recent inquiries as to the reason which led the Committee of Revision to admit salol and wool fat into the Pharmacopœia have elicited letters on the subject from Dr. Chas. Rice and Dr. R. G. Eccles, who replied as individual members of the committee.

Concerning salol Dr. Rice has to say that this was admitted under a misapprehension. When it became necessary, shortly after the organization of the Committee of Revision, to decide what new articles were to be admitted into the Pharmacopœia, a list of all articles suggested for this purpose in reports to the convention, or proposed by the members of the committee, or recommended by correspondents was drawn up. Among these articles were many of the newer synthetic remedies protected by proprietary rights, and salol was one of these. Some members of the committee had been informed that salol was, in fact, not so protected, and in consequence of this—no doubt erroneous—information it passed through all the subsequent stages of scrutiny and deliberation unchallenged. The original list of newly proposed articles

was first submitted to the sub-committee on therapeutics, consisting of all the medical practitioners on the Committee of Revision, and this sub-committee reported back a selected list of articles deemed worthy of being introduced into the new Pharmacopoeia. The list was then submitted to the general committee, and, after having been discussed and to some extent modified, was finally adopted. This list contained salol. Even during the period of proof reading, at which a number of gentlemen, not members of the committee, very kindly and efficiently assisted, no voice was raised against its admission. It was only after the United States Pharmacopoeia had been printed and issued that attention was drawn to the proprietary character of the title "salol." Of course, there is no other excuse to be made for its presence in the United States Pharmacopoeia, except that it was admitted under a misapprehension.

There was no misapprehension about the admission of wool fat. Knowing that the names of the best commercial products of wool fat are trade marked, they looked about them for a title which was not subject to proprietary claims. Of the titles suggested, the most appropriate appeared to be that previously chosen in the "Additions" of 1890 to the British Pharmacopoeia of 1885, viz., "adeps lanae hydrosus." This name is not under proprietary control, and, when the article is prescribed under this name, any commercial brand conforming to the official descriptions and tests and not otherwise infringing upon any patents or proprietary rights may be dispensed. It is true that there is at present probably but one commercial brand which is generally recognized as meeting all the requirements, and it is quite proper that this brand be dispensed, though it has a trade marked name, when "adeps lanae hydrosus" is prescribed. But the committee of revision, knowing the commercial name to be trade marked (and not being misinformed in this case as it was on salol), could not introduce the substance into the Pharmacopoeia except under a title uncontrolled by private interests.

## Urinary Analysis.\*

By WM. B. PARKER.

I have no new tests to offer; I have simply attempted to give the tests that I have tried and found worthy, in as clear, concise, and comprehensible a form as possible, with the prime object to enable those druggists who do not possess such valuable books as Tyson, Whipple, Nuys, etc., if called upon, to do any work that may be required of them in this line.

### PHYSICAL CONDITIONS.

**Quantity Voided.**—I will first state the physical condition of urine. The normal quantity of urine voided is 1200-1500 Cc [40-50 fl. oz.]; there is an increased amount passed in diabetes, and a diminished volume in Bright's disease.

**Specific Gravity.**—Normal average specific gravity of urine is about 1020, though the limits of normal urine extend from 1015 to 1028; and it does not necessarily follow that it is abnormal if it transcends even either of these bounds.

**Reaction.**—Normal urine,—that is a mixture of that which has been passed

during the entire day,—is *always acid*; but after standing for some time, it becomes alkaline, and that passed after meals, during digestion, is also alkaline.

### ALBUMIN.

After having noted the physical conditions, the first step is to test for albumin. I will give only four of the most important tests.

**Heat Test.**—Fill a test-tube one-third full of the urine acidulated with acetic acid, and heat to boiling. If any precipitate is formed, it is due either to albumin or to earthy phosphates; if to the latter, it will be dissipated by the addition of 10 to 15 drops of nitric acid, and if to albumin, it will remain when thus treated.

**Heller's Method.**—Put a convenient amount of nitric acid into a test-tube. From a pipette allow the urine to trickle down the side of the test-tube, slowly and carefully, so as not to mix with the acid. At the point of contact, a white zone is formed, if albumin is present, of varying thickness, according to the amount the urine contains. Care should be taken to distinguish the albuminous zone from a similar one formed with the mixed urates. The two may be distinguished in this manner: The zone begins to appear with the urates not so much at the point of contact, but above it; the upper surface of the zone is not so clearly defined as it is in the case of albumin, but is mixed and diffused in the urine.

**Double Iodide of Mercury and Potassium Reagent.**—This has the following composition:

Potassium iodide..... 3.22 Gms.  
Mercury bichloride..... 1.35 "  
Distilled water..... enough to make 100 Cc.

For use acidulate the urine and then add the reagent. Five Cc. precipitate 5 Mg. of albumin.

**Picric Acid Test.**—This is simply a saturated aqueous solution of picric acid. Place some of this in a test-tube, and allow the urine to fall drop by drop upon it. As it passes through the solution, it will be followed by a beautiful opaque white cloud. This test, though very striking, is not a very delicate one.

### SUGAR.

**Trommer's Test.**—Place 4 or 5 Cc. of the urine in a test-tube; add a drop or two of a 1:30 cupric-sulphate solution and then 4 or 5 Cc. of potassa solution. On mixing, there is immediately precipitated beside the yellow precipitate of earthy phosphates, a blue one of hydrated cupric oxide. Now if sugar be present, the precipitate will be redissolved upon agitation and a beautiful transparent, blue liquid be formed; if there be no sugar, a greenish, turbid liquid will be formed. Now boil, when a copious, yellow precipitate of hydrated cupric suboxide will be deposited, changing, on standing, to the red oxide, of a reddish-brown color. Should there be any albumin present, it must be removed before applying the sugar test.

**Note.**—Salol is said to behave like sugar.

**Fehling's Test** consists of the two following solutions:

1.—Cupric sulphate..... 34.64 Gms.  
Distilled water..... 200 "  
2.—Neutral sodic-tartrate..... 1.73 "  
Soda solution (sp. gr. 1.200)..... 500 "

No. 1 is added to No. 2 gradually; and to the product enough water is added to make 1 liter. To a small quantity of the finished solution, in a test-tube, add about 4 times as much water. Boil for a few minutes. If it remain clear, add the urine, a drop at the time; and if there be

sugar, a yellow precipitate will be formed after the first few drops have been added. Continue the dropping until an equal amount of urine has been added; if, then, there be no precipitate, there is no sugar present.

**Pavey's Test** consists of the following:

Cupric sulphate..... 32 grains  
Neutral potassic-tartrate..... 64 "  
Potassa..... 128 "  
Distilled water..... 2 fl. oz.

The solution is made and used in the same manner as Fehling's.

**Bottger's Bismuth Test.**—Add to the urine in a test tube, an equal amount of potassa solution and a small quantity of bismuth subnitrate. Boil a few minutes, and if there is any sugar present, the metallic bismuth will be deposited on the sides and bottom of the tube as a black or brownish precipitate. The reason for this is that sugar has the power of reducing the salts of bismuth.

**Note.**—Jung says that when rhubarb has been previously administered the urine gives the brown discoloration just mentioned.

**Wender's Methylene-Blue Reagent.**—Dilute 5 to 10 Cc. of the urine tenfold; place 1 Cc. of the dilution, 1 Cc. of a 1:1000 aqueous solution of methylene blue, and 8 Cc. of 4° potassa solution into a test-tube, and dilute with 2 Cc. of distilled water; then heat over an open flame until it boils up several times. If sugar be present, a total discoloration of the fluid will occur; and if the color remains unchanged, the urine is not diabetic.

**Mulder's Indigo-Carmine Test.**—Take a small quantity of a 1:1000 solution of indigo-carmine, and render it alkaline with sodium carbonate; boil with half its volume of the diabetic urine. The color will change in the following order: From blue to purple, red, yellow, and finally straw color. After cooling, the colors are reversed, the original blue color being gradually returned to.

**Hoppe's Sugar Test** consists of:

Ortho-nitro-phenyl-propionic acid..... 1 part  
Sodium hydroxide..... 2 parts  
Distilled water..... 20 "

Boil ten drops of urine with 5 Cc. of the reagent. A deep blue color shows at least  $\frac{1}{4}$  per cent. of sugar to be present.

**Fermentation Test.**—Place a piece of compressed yeast (Fleischmann's is the best) about the size of a walnut into a large test-tube, and fill the tube with the urine. Through a perforated cork put a bent glass-tube that reaches nearly to the bottom; cork tightly, and place the other end of the bent tube into a glass. After twelve or fifteen hours, if sugar be present, fermentation will begin and force the urine through the tube into the glass.

**Robert's Fermentation Quantitative Test.**—Fill two four-ounce bottles with urine; into one put a piece of yeast about the size of a walnut, and stop with a nicked cork. In twenty-four hours take the specific gravity of both, after having removed the scum. The difference of specific gravity will be indication of the number of grains of sugar present in the fluid ounce of urine.

**Safranine Test.**—Boil 1 Cc. of the urine with 2 Cc. of potassa solution and 5 Cc. of a 1 per cent. solution of safranine. If there is any sugar present, the solution will be decolorized. Should there at the same time be any albumin in the sample, it should be removed before the sugar test is applied.

**Bishop's Mathematical Test.**— $x$  = number of ounces voided;  $y$  = specific gravity

\* Read at a meeting of the Alabama Pharmaceutical Association.

of the urine; 880 = primary number, which is the product of the normal number of ounces voided in a day by the normal specific gravity (as read on a urinometer).

880

Then  $y - \frac{880}{x} + 1000 =$  the number of

grains of sugar present to the ounce. This test is serviceable in diabetes, to determine the variations in the pathological condition of the urine.

#### BILE.

**Rosin's Modification of Moleschott's Test.**—2 or 3 Cc. of a 10 per cent. solution of iodine tincture in alcohol are poured down the side of a test tube containing the urine, in a manner that the fluids will not mix. Hold the tube very much inclined. If there be any bile pigment present, in a few minutes a fine green ring will appear at the point of contact; if none is present, the reagent destroys the urochrom from the formation of a pale yellow or colorless ring.

**E. Fleischl's Test.**—The urine is mixed with a concentrated solution of sodium nitrate, and concentrated sulphuric acid is slowly and carefully added, so as not to mix. If bile be present, at the point of contact of the two fluids a green color will be formed, very gradually changing to blue, violet and yellow.

#### UREA.

**Fowler's Test.**—Mix urine, 1 part, with Labarraque's solution, 1 part; there will be considerable effervescence. Shake the jar containing the mixture occasionally for two hours. Take the specific gravity of the quiescent fluid, and find the specific gravity of the mixture of urine and Labarraque's solution before decomposition. (This is done by multiplying the specific gravity of the hypochlorite solution by 7, adding the specific gravity of the urine and dividing by 8.) Subtract the specific gravity of the quiescent mixture from this result, and multiply by 77; the product will be the percentage of urea.

#### URIC ACID.

**Butt's Test** consists of the following:

Cupric sulphate.....	1.484 gms
Sodium hypophosphite.....	20 "
Potassium and sodium tartate.....	40 "
Distilled water.....	enough to make 1,000 "

First remove the phosphates from the urine by adding an excess of sodium carbonate and filtering, now, carefully titrate with the test solution, one cubic centimeter of which will cause a white precipitate exactly equal to 1 milligramme of uric acid.

**Hopkins' Test.** 10 to 100 Cc. of the urine add 30 grammes of pure, finely powdered ammonium chloride; allow to stand two hours, collect the precipitate (ammonium urate) upon a filter, wash it with a saturated, aqueous solution of ammonium chloride, and dissolve it in a minimum quantity of distilled water. Repeat the operation of precipitating with saturated solution of ammonium chloride, and redissolving in water several times to purify it. Finally, dissolve in hot distilled water, and decompose the ammonium urate by boiling in excess of HCl. The solution (concentrated, if necessary) is set aside, and the uric acid allowed to separate out. The amount may be determined by any accustomed method—as evaporation over a water-bath or weighing on a tared filter, etc.

#### URATES.

Uric acid is bi-basic, forming two series of salts: neutral and acid,—the former being much more soluble than the latter.

The urates are soluble at the temperature of the body; but on reducing the temperature the acid salts are precipitated. If acid be added to the urine, the neutral salts are converted into the acid salts which are then precipitated.—TYSON.

#### PHOSPHATES.

There are two kinds of phosphates present in the urine: earthy and alkaline. The earthy may be precipitated by the addition of any alkali; and to precipitate all the alkaline phosphates, add about one-third as much magnesian mixture.\* If the entire fluid, then, has a milky appearance the phosphates are normal; and if denser, they are increased, and if only slightly cloudy, they are decreased.—TYSON.

#### CHLORIDES.

The addition of one drop of a 1:8 solution of silver nitrate to the urine, causes a precipitate of chlorides in white cheesy lumps, if the chlorides are normal; if present to the extent of less than 1/2 per cent., no such lumps will be formed, but the whole will become slightly milky; and if no cloudiness appears, then the chlorides are absent.—TYSON.

#### SULPHATES.

**Tyson's Test** calls for the use of the following solution:

Barium chloride.....	2 parts.
Distilled water.....	16 "
Hydrochloric acid.....	1 part

The sulphates are thrown down by an addition of any of the barium salts. The best working formula is the above, and is applied in the following manner. Add about one third as much reagent as urine used. If the mixture assume an opaque, milky appearance the sulphates are normal; if it become thicker and more dense, the sulphates are increased; and if there is only a slight cloudiness, then the sulphates are diminished in quantity

### The Practical Value of a Drug Journal.\*

By J. C. FALK, M.D., PH.G.,  
St. Louis.

There is probably not another calling in which a trade journal is of so much practical value as in that of the retail druggist.

The very varied nature of the demands made upon the druggist in the course of his every day business life makes it imperative upon him in order that he may meet the emergencies as they arise with equanimity, accuracy and dispatch, to be well versed in all the details of the vocation.

The knowledge obtained by the druggist is chiefly from four sources, viz.: the store, the college of pharmacy, pharmaceutical meetings and reading.

As a matter of fact the knowledge he acquires in the store does not to any extent originate there *de novo*, but is usually the application of some facts he has read or heard of.

No graduate in pharmacy would for an instant claim that he learned all worth knowing pertaining to pharmacy up to the time of his graduation; and even admitting that he did know everything of value in that profession on the day of receiving his diploma, it would not necessarily result that he would keep abreast with the studies made in these days of rapid advances.

How is he to keep himself up with the main body of modern pharmacists? Pharmaceutical meetings are too infrequent

\* Magnesian mixture is made by dissolving 3 parts each of magnesium sulphate and ammonium chloride in 20 of water, adding 5 parts of ammonia water letting stand for two days and filtering.

\* Read at the meeting of the Missouri State Pharmaceutical Association, June 12, 1894.

and brief to possibly cover the scope of progressive pharmacy. He cannot take a course in a college of pharmacy every year; that would be impracticable.

What must the good pharmacist then do to retain his position of trust in a responsible calling? He must read. What should he read? He peruses the various text books of pharmacy, chemistry, materia medica and the collateral sciences. These give him the accumulated knowledge in those branches up to within a year or two of their publication and the volumes he has may be anywhere from one to ten years old. The result is that he gets some essential information in a systematic form for reference as he requires and seeks it. But he needs more prompt and up-to-date acquaintance of the progress made in things that so vitally interest him, and this requirement is met by the drug journal of the day. The drug paper comes to him regularly, replete with information of a practical kind from which he can pick up points for daily use at the prescription counter, in the laboratory and in the store generally.

He reads of a plan for obviating some dispensing difficulty of the latest discovery in chemistry, the composition of the newer proprietary preparations, the recent acquisitions to materia medica and familiarizes himself generally with new things that are liable at any moment to appear in a prescription.

In the laboratory of his store he has frequent use for the practical articles that appear in the drug periodical. He learns of a new or improved process for preparing a fluid extract, liquor, elixir or other galenic preparation, which may save him much time, labor or expense. I recall one instance where a five line item in a drug journal saved me three-fourths of the cost in manufacturing an ordinary chemical product.

For the store he gets hints which often prove of direct financial gain. A little suggestion about the arrangement of a show window, counter or store display; the preservation of perishable drugs, chemicals or preparations; the care of sundries, cigars, the soda water fountain and a hundred kindred subjects are apt to be touched upon by the drug journal, which will be of profit to the observant druggist.

The practical value of a drug journal by no means ends with the first perusal for there are many occasions when an item seen then finds its application some time later, and the pharmacist may want to refer to the article again. To do this he must carefully preserve the files of his journals complete. Nothing so enhances the value of a file of journals as a comprehensive index; and in this respect some periodicals are a little remiss in not evincing sufficient care in the arranging of an index that embraces all the referable contents.

The drug journal through its personal and news items is frequently the means of pleasantly renewing old acquaintances among fellow clerks and college classmates who have become separated and lost to sight of one another it may be for years.

The readers of a pharmaceutical journal owe it to themselves and to their confrères in the profession to assist in making the paper of greater value by communicating to it from time to time such items of scientific or general interest that often transpire in every drug store. These may be jotted down briefly and sent to the editor, and will frequently surprise the author at the value placed upon them by others, or the interest they will awaken.

This is a pictorial age and editors of

pharmaceutical periodicals are realizing more each year the value of illustrations in their publications. Proper subjects, illustrated with discretion, make the articles more interesting and sometimes more instructive to the reader, and this will of course redound to the benefit of the author, editor and publisher.

Advertisements, so necessary to the life of all modern periodicals, are not without practical utility to the druggist. In the advertising pages of his drug journal he acquaints himself with the latest improvements in apparatus, appliances and fixtures; he sees special offers in certain lines of goods which may save him dollars to take advantage of, and in many ways he will find it to his benefit to be familiar with the cards of the advertisers.

In closing I will say that no druggist, proprietor or clerk can afford, in justice to himself, the profession or the public to be without one or more drug journals.

### Quantitative Determination of Castor Oil.\*

By G. MORPURGO.

Several Italian chemists have studied this subject recently. Leonardi first published his method which is founded on the solubility of castor oil in absolute alcohol and the insolubility of other oils in that solvent. This method is, wrong, however, for, as was shown by Muspratt in his handbook of chemical technology in 1864, other oils when mixed with castor oil exhibit a different degree of solubility than do the same oils alone.

I have obtained better results from a method of my own devising which is based upon the fact that all oils except that of the castor bean are soluble in paraffin oil. When a fixed oil containing more than 10 per cent. of castor oil is well mixed with three times its own volume of paraffin oil and allowed to stand at a temperature of from 10 to 15° C two layers are formed, the upper and larger layer consisting of the fixed oil and paraffin oil and the lower, thinner layer consisting of the castor oil. If dark mineral oil is used instead of the purified oil the impurities of the mineral oil will be given up to the castor oil and the latter will become quite dark leaving the mineral oil pure and clear. If it is desired to examine an oil according to my method it is decidedly advisable to previously test the mineral oil to be used. By noting the results of each test, comparing the quantity of castor oil used with the thickness of the layer which separates out, this method can be used for quantitative estimation.

According to F. Di. Vetere the following method serves well for quantitative determinations. If a mixture of seed oil and castor oil be mixed with half its volume of hydrochloric acid the mixture after a time separates into three layers the lower being the hydrochloric acid the middle the castor oil and which take as a color which varies with the character of the oil present and finally the upper layer consisting of the seed or olive oil.

These methods, however, only give accurate results when the oil under examination contains as much as 40 to 50 per cent. of castor oil.

Its solubility in 90 per cent alcohol serves as an identity test of the castor oil as does also the following proposed by Draper (*Zeitschr. f. Analyt. chemie* 116): Add 5 or 6 drops of nitric acid to a few

drops of the oil, when the reaction has ceased neutralise with sodium carbonate. As soon as the odor of nitric acid odor has passed off the odor of enanthylic ether manifests itself.

### Oil of Bay.\*

#### SOLUBILITY.

With regard to the solubility of oil of bay in alcohol, considerable doubt and confusion has hitherto existed. The U. S. Pharmacopoeia of 1880 while giving to the oil the very incorrect specific gravity of "about 1.040," also stated that it is "soluble in an equal weight of alcohol." Geo. M. Berringer in commenting on this subject (see *Amer. Jour. Pharm.*, 1888, pp. 441-445) remarks as follows: "This prescription is incorrect in at least one important point, namely, the specific gravity stated, and misleading, if not absolutely erroneous in its statement regarding the solubility. These errors have been copied into the Dispensatories and various text books without comment or correction." He also remarks further: "The writer has examined a number of specimens of this oil, and has never found one yielding a perfectly clear solution with alcohol or absolute alcohol (the oil from the green leaf appears to afford a less turbid solution). It appears to me that the compilers of the last edition of the U. S. Pharmacopoeia (referring to revision of 1880) either had examined an adulterated sample of the oil, or did not consider it pertinent to tersely explain this important peculiarity of this oil."

In this connection we also deem it important to note that the conclusions so positively stated by Mr. Berringer regarding the solubility of this oil are not strictly correct, and that on this point the Pharmacopoeia of 1880 was not so radically wrong. Although previous observations had led to the adoption by the present Pharmacopoeia (1890) of the statement that the oil "yields with alcohol a slightly turbid solution," our subsequent and more extended observations on this point have convinced us that this is not invariably the case. Some of the oils of our own distillation afford with an equal volume, or with three or four times their volume, of official alcohol a perfectly clear solution, and we have observed the same character with some samples distilled in West Indies. The products of other distillations, on the other hand, will afford with an equal volume or more of alcohol a slightly turbid solution, and it is therefore possible that a pure oil of bay may afford either a clear or a slightly turbid solution with alcohol. This difference in solubility evidently does not depend entirely on the relative amount of eugenol contained in the oil, as might be supposed, for it is possible for oils to yield a clear solution with an equal volume of alcohol or glacial acetic acid and yet have a lower specific gravity than some yielding a turbid solution, as the following examples which we have noted will indicate:

Specific Gravity.	Solubility in	
	Alcohol	Glacial Acetic Acid.
0.962	turbid.	turbid.
0.965	turbid.	turbid.
0.967	clear.	clear.
0.975	turbid.	turbid.
0.976	turbid.	turbid.
0.979 (West Indian)	turbid.	turbid.
0.989 (West Indian)	clear.	clear.
0.982	clear.	clear.
0.984	clear.	clear.
0.986	turbid.	turbid.

According to the investigation of Mitt-

\*From a circular by Fritzsche Brothers, New York

mann (*loc. cit.*, p. 589) it may be inferred, as he had also actually observed, that it is the highest boiling portion of the oil, probably the polyterpene or diterpene, which cannot be easily distilled without decomposition, or which may itself be a decomposition product, to which the turbidity of the solution of the oil in alcohol is due.

#### TEST FOR PURITY.

The only specific test for the purity of oil of bay is that proposed by Geo. M. Berringer (*Amer. Journ. Pharm.* 1888, pp. 441-445), and which has unfortunately been incorporated in the text of the U. S. Pharmacopoeia. The test which consists in the action of concentrated sulphuric acid on the oil, and subsequently warming the resinous mass thus formed with 50 per cent. alcohol, was assumed to be capable of discriminating between the oil of bay and the oils of pimenta and cloves, and it was even stated (*loc. cit.*) that five per cent. of oil of cloves can be easily detected by the purplish red fluorescence. Although the test mentioned would appear occasionally to possess some discriminating value, like all others of such a purely empirical character it is by no means reliable. Its careful application to a large number of samples of oil of our own distillation and to those distilled in the West Indies, together with comparative tests made at the same time with the oil of pimenta and the oil of cloves, which were likewise of our own distillation and absolutely pure, has indeed convinced us that no oil of bay should necessarily be considered impure which does not show the behavior described in the test proposed by Mr. Berringer.

In concluding for the present our remarks on this subject, we beg leave to assure our patrons that we shall continue to furnish, as heretofore, the finest attainable quality of oil of bay, distilled from leaves imported directly from the West Indies, and that we shall not feel compelled to restrict our product to a specific gravity of 0.965, as the firm to which we have referred in the beginning of this circular state that they "feel forced to do in self-protection." On the contrary, we shall be able, with rare exceptions, to furnish an oil of bay having a specific gravity within the limits ascribed to it by the present U. S. Pharmacopoeia, and such an oil must be assumed to be preferable to one which has a constant low specific gravity, and therefore contains a relatively larger amount of the less valuable terpenes.

As previously stated, however, a pure oil of bay may form either a clear or a slightly turbid solution with alcohol, and it may likewise fail to conform to the above mentioned official, empirical test without containing any admixture of the oil of pimenta or the oil of cloves, although both of the latter oils, like the oil of bay, contain as their chief and essential constituent the well characterized body known as eugenol.

#### STABLE SOLUTION OF IRON IODIDE.

[*Farm., Ital.*]

	Parts by weight.
Iodine .....	75
Iron .....	45
Distilled water .....	50
Sugar .....	100
Glycerin .....	q. s. ft. 450

Mix the iron, iodine and water. When the reaction is finished filter and add the sugar and glycerin, warm until clear and then bottle, stopping up carefully.

\*Translated for the AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD from the *Pharmaceutische Post*, No. 22, Vol. xxvii page 245.





## Rules to Govern the . . .

### . . . . Employees of a Pharmacy.

Compiled by THOMAS J. KEENAN.

Communicated to the New York State Pharmaceutical Association at Saratoga, June 26, 1894.

The credit of originating the set of rules which I am privileged to bring before you belongs to the late Alexander Hudnut, proprietor of the successful pharmacy bearing his name in the old *Herald* building on Broadway. Mr. Hudnut's employees were governed for many years by these rules and they have received the approval of every pharmacist who has taken the trouble to familiarize himself with their operation. The late Professor Bedford was familiar with the rules in their original form and it was his intention at one time to edit and prepare them for publication. The sudden and fatal illness of Professor Bedford prevented this, however, and it was left to the writer, who was his associate in editorial work to prosecute the undertaking.

Certain emendations and additions have given the compilation a new character which I hope will make it of some value, if not as a system worthy of following to the letter, then as a suggestive basis for individual sets of rules.

#### OF EMPLOYEES.

**HOURS.**—Every employee is required to be promptly on hand for business at the time agreed upon, and the time of arrival and departure, also of meal hours, must be reported to the cashier for entry on Time Book. If such entry on Time Book is not made at the time it will involve a fine of 10 cents for each failure.

Every employee who stays over his time at the request of the manager may claim time off the following week equal in amount to the over-time.

He may use this allowance of time as soon thereafter as the interests of the business will permit, first having an understanding with the manager as to when the time off can be best taken.

**MEAL HOURS.**—In regard to meal hours and time off, no clerk must leave the store unless two prescription clerks still remain there on duty. This is to insure a proper force being always in the store to rightly conduct the business.

When from any unavoidable cause the clerical force in the store is short the clerk in charge must not permit any employee to go out for his meals, but they must have their meals sent to the store.

**NEW CLERKS.**—New Clerks will, especially during the first few weeks, inquire of the older employees with reference to all matters connected with the business of the store with which they are not familiar.

They are expected and required to ask questions freely, and not to attempt to wait on and supply the wants of customers unless they are familiar with the articles and know their location in the store.

By strictly complying with this rule they will show that the interests of the business are of greater importance to them than the exhibition of professional pride.

We cannot tolerate in this store that kind of egotism which would risk the loss of sales rather than not seem well posted on every point.

If you think the head clerk could do better with a customer call him up without hesitation.

**SENIOR CLERK.**—(A). Every senior clerk is expected when required to act as a relief behind the soda or mineral water counter, and to be always observant that soda and mineral water customers are served promptly.

Every clerk is expected to learn the details of this department at an early period after his enrollment on the force.

(B) Every clerk in this store is expected to embrace every suitable opportunity to recommend

our own specialties and to sell as many of them as possible; but where it is more advantageous to write a special prescription, he should always do so. Every clerk is expected by every legitimate means to make his sales count up as large as possible.

(C) Every clerk in this store is expected to assist in keeping a good supply of every article required in stock by making entries in the Want and Manufacturing books of every deficiency coming under his notice. This is a matter of vital importance. No article must ever be permitted to run out, but must be purchased as soon as it begins to run below a reasonable stock or supply.

(D) Packages of drugs must be put up by licensed clerks only, or under their immediate supervision. And the initials of the clerk who puts up each package must be entered on the wrapper.

The Prescription Clerk will see that there is always a good supply of packages of drugs in their appropriate drawers.

(E) There must be no levity indulged in behind the prescription counter; no laughing or loud talking.

Great caution should be observed in making any remarks to or in presence of a customer about the medicine prescribed by his doctor.

Consulting books of reference should not be done in presence of the customer.

**THE NIGHT CLERK.**—The night clerk must not go behind the counter when there are no customers in the store. He must always be out in the front part of the store ready for business.

**ORDERS.**—(A) When a customer wishes to leave an order for an article we do not keep regularly in stock the clerk must exact a proportionate deposit of money as a guaranty of good faith on the part of such customer.

(B) When orders of any kind are to be sent out C. O. D., by messenger or express, the clerk having charge of the order will first deposit with the cashier a ticket bearing the name of customer, salesman and messenger, and also the price of the goods.

**MAIL ORDERS.**—Orders by mail must receive immediate attention, and be sent off by mail as soon as possible. The orders must be at once entered on the book kept for that purpose, known as the Want Book.

**OUT OF TOWN ORDERS.**—When such are received they must immediately be entered in the Order Book and a postal card sent to the party ordering,

notifying him that his order has been received and will be executed at once.

**MARKING GOODS.**—(A). All goods must be plainly marked with both cost and selling price. This rule applies to merchandise of every description.

(B) When goods are sold the price mark should be rubbed off. This applies to goods of every description.

#### PRESCRIPTION DEPARTMENT.

**CHECKING PRESCRIPTIONS.**—(A). Whoever receives a prescription to compound will immediately say to the customer "Wait one moment till I give you a check." He will then immediately hand the customer a check, and before he lays the prescription down or performs any other act whatever paste the duplicate number on the margin of the prescription.

(B) Check all prescriptions. Whoever compounds a prescription must have it carefully examined and checked off by another clerk, who must carefully examine every article in the prescription, also number, date, and every detail connected with it, precisely as if he had himself prepared it. The compounder and the one who checks will enter their initials on a label to be placed on every bottle or box containing a prescription, including renewals, and also on the prescription itself.

(C) In checking prescriptions the party checking should always take notice whether the quantity of liquid required by the formula is in the bottle; also observe the weights that have been used in weighing, as well as the material used in the powders. He must critically examine by smelling, tasting, etc., mixture and ointments, oint pills, powders, etc., and in every way satisfy himself that the prescription contains the ingredients as ordered and is in every way correct.

(D) When the prescription is completed, and there are two or more articles, wrap them together in the same paper and paste the number on the outside.

**PREPARING PRESCRIPTIONS.**—(A). Prescriptions must be prepared as soon as possible after they are received, and when a prescription is left to be compounded and the customer says he will call for it at a certain hour, every possible effort must be made to have it ready for him before the time specified.

(B) Any mixture which is liable to separate or deposit a sediment must be labeled with "This mixture to be shaken before taking each dose," and the word "shake" written also on the lower margin of the prescription.

Liniments liable to separate must also have a label. "This liniment to be shaken before using." If such label is not required on the liniment, then use the label which reads "For external use only."

(C) Prescriptions must be dispensed with the greatest neatness and elegance, corks sealed and the bottle or box tied up with pink twine, the best wrapping paper, flint bottles, porcelain jars, best quality boxes, and in every respect equal to the best.

(D) Always write the name of the doctor and the directions on the label if possible to obtain them. The label must be written very plainly. Tie up every package with pink twine.

If the prescription has the name of the patient on it write his name on the label, or his number, as the case may be.

**DOUBTFUL PRESCRIPTIONS.**—(A) When a prescription is received about which there is doubt as to whether the physician intended it as written, or when there is reasonable doubt as to what is prescribed, do not dispense the medicine. If the customer is not in haste and we can gain time for the purpose send to the doctor privately a note of inquiry; otherwise hand the recipe back to the customer and request him to see the doctor about it.

(B) Illegible writing on prescriptions must be corrected by the compounder, in order to guard against mistakes in the event of the patient requiring a renewal at a future time.

(C). If the formula for a preparation used in a prescription is not uniform, or is liable to be com-

pounded in various ways, the dispenser must write on the margin of the prescription the exact formula he has used.

**UNSIGHTLY MIXTURES.**—No unsightly or incompatible mixture is allowed to be sent out of this pharmacy until the manager's attention has been drawn to the same, and every legitimate means tried to make a sightly and elegant compound.

**PILLS.**—In preparing a prescription of pills mention on the margin thereof the kind and quantity of excipient used in compounding them as nearly as possible. The same in regard to suppositories and capsules.

The intentions of this rule are, that on renewing a prescription, whoever compounds it will be able to prepare it exactly as in the first instance.

**EXCIPIENTS.**—When pills are ordered by a physician and it becomes necessary to use an excipient use either gum arabic and syrup, conserve of roses, powdered licorice, tragacanth, honey, alcohol, water, etc. In pills where a quantity of oil is ordered use solution yellow wax in ether. In compounding pills in hot weather use powdered starch.

**CAPSULES.**—(A). In dispensing medicines which are to be enclosed in capsules do not handle the capsules in such a way as to leave any taste of the medicine on their surface. It is understood that all capsules are to be massed. Wash the hands first and use a pin to pick up the pills.

(B). With reference to capsules and gelatine coated pills the two are not to be confounded. Gelatine coated pills must not be given in recipes where capsules are directed.

**BLISTERING PLASTERS.**—In spreading cantharidal cerate always paint the plaster over afterward with the ethereal solution of cantharides, a bottle of which with brush attached will always be kept in chemical closet.

**SUPPOSITORIES.**—Where the physician does not specify the amount of cacao butter to be used in making suppositories use enough to make each cone weigh 15 grains when finished.

**RENEWALS.**—(A). When a prescription is renewed always take the renewal check from the customer and destroy it. Also, the clerk who checks a renewal of a prescription must himself make sure that it is actually the medicine which is required by examining the label on the bottle or box brought in by the customer. Unless he does this he has not properly checked the prescription. Also, he must see the check, if any, brought by the customer.

(B). In renewals the soiled label must be renewed, and, if necessary, the bottle washed. This applies also to pills and powders.

**RESPONSIBILITY.**—Whoever dispenses a prescription in this store will be held personally responsible for any mistake in compounding.

The fact of the wrong drug having been put in the shop bottle by another clerk will not relieve the dispenser from responsibility, his duty being to critically examine every article he dispenses.

To avoid mistakes permit no talking while you are preparing prescription.

**SUBSTITUTION.**—No substitution is permitted in prescription unless the article required is perfectly inert and cannot be obtained readily by sending to other stores.

**POISONS.**—Poisons to be taken internally must always be labeled "Drop With Care," or "Use With Caution." But unless so directed by the physician, the word poison must not be written on the label.

**BOTTLES.**—(A). Glass stoppered bottles must always be used in prescriptions for such articles as act injuriously upon corks.

(B). Blue glass vials must be used in prescription where the mixture is liable to be acted on by the light, and the fact of blue glass being used should be entered on the margin of the prescription.

**PRICING.**—(A). When a high priced prescription has been put up, or one that seems dear according to its bulk, always explain to the customer that it is an expensive preparation, and that it is put at as low a price as possible.

(B). And when a customer wants the price of prescription before having it prepared be careful to charge a fair price only, and if he refuses to leave it at the price named, make an earnest effort to induce him to leave it by making the price as low as possible. Don't let him go if it is possible to prevent it.

(C). We propose to make only a fair and honest price for prescriptions. Our lowest charge for any regular prescription written by a doctor is 15 cents; such as 1 dose of blue pills, or compound cathartic etc. Single powders composed of some cheap drug in small quantities at same price, 15 cents.

(D). The bottle or jar used in a prescription is always charged extra, and in entering the price on a prescription it must be for the medicine only, the bottle or jar being charged for according to the schedule.

**COPIES.**—(A). Avoid giving copies of prescriptions if possible, but if the customer insists on it then he must have it, but the word "copy" must not be written on it or any other writing or number, which would indicate the fact to other druggists that it had been put up before. The original prescriptions are always to be kept if possible, giving the customer a copy if he demands it.

(B). Under any circumstances an original prescription must never be taken out of the prescription book to give to the customer.

**PRESCRIPTION COUNTER.**—(A). The prescription clerk will see that his counters are kept perfectly clean and neat. As soon as a prescription is checked off return the stand bottles to their places on the shelves and clean up all the utensils he has used.

(B). He must see that all dispensing bottles are kept full or nearly so.

(C). He must enter at once on the want book, or on the manufacturing book, any article that is wanted.

(D). Quiet must be observed when compounding prescriptions, especially when the customer is present, as any loud talking, asking questions, or apparent inattention excites distrust and weakens confidence on the part of the customer.

(E). The prescription clerk must put away in their respective places all drugs and chemicals that are received in the store, and also fill all tincture bottles.

**ADDRESS OF PATIENT.**—Inquire the name and address of every person who leaves a prescription to be prepared and write it on the back of the prescription. This precaution need not be observed if the prescription is paid for at the time it is left. But in all cases when a stranger leaves a prescription the clerk must try and get payment in advance if it can be secured without giving offense to the customer.

#### MISCELLANEOUS.

**MESSENGERS.**—When a child or a servant is sent for a prescription always write the price on the package in plain figures in ink. The reason for this rule is the fact that messengers have frequently been known to retain for their own use a portion of the change.

**POISONS.**—(A). The law relating to poisons must be enforced. Entries for the sale of every poison sold (unless to a party who regularly gets it from us) must be made in the book kept for that purpose.

(B). No poisons sold in wine-glasses or tumblers.

**PRICES OF GOODS SOLD TO PHYSICIANS.**—(A). I drugs or prescriptions for their own family use charge them from one-third to one half the regular price, according to the medicine.

(B). If fancy goods, deduct one-third, provided always such deduction will cover the cost.

**CREDIT.**—(A). No credit to any but established houses, unless with the consent of the proprietor or manager.

(B). Goods sold on credit must be charged on the Day Book before they are delivered to the customer.

(C). Always give a bill with the goods.

**MERCHANDISE TO EMPLOYEES.**—(A). Employees wishing to purchase any article from the stock will fill out a printed form for the same and hand it to the manager or head clerk who will then deliver the goods.

(B). Hereafter any employee of this establishment requiring goods from our stock will not pay for them in cash, but have the same charged on the Day Book at cost price, and settle for them no night. And such goods must invariably be purchased through either the manager or head clerk.

**TESTING DRUGS.**—Every package of drugs coming into the store must be critically examined by the head clerk, and in all instances must be marked with his initials if goods are satisfactory. The gentleman in charge of gallery will not put away any package of drugs not marked with initials of a proper examiner.

**PRICING GOODS.**—Whoever takes charge of a bill of goods to put them away must put both the cost and the selling price on every article, and, if a perishable article, the date on which it was received.

Old stock of every kind must invariably be brought to the front or on top of the fresh stock, so that the old may be sold off first; thus always insuring fresh goods.

Every bill of goods must be checked off on the same day.

**PREPARATIONS.**—(A). Whoever prepares any preparation of any kind for the store must first inquire as to the quantity required.

(B). Never make any change in a formula without previous consultation with the manager.

(C). Show all preparations to the manager when completed and enter them in the manufacturing book.

(D). After making each preparation figure up the exact cost and mark it on the bulk package before putting it away.

**WANT BOOK.**—When a customer calls for any article pertaining to the drug or patent medicine business of any kind or description whatever that cannot be found in our stock, place it on the want book.

It is a good plan if possible to enter a want before you wrap up the goods for the customer. This precaution will often insure the entry of a want article which otherwise would be forgotten in the press of business.

**BREAKAGE.**—When an employee breaks any article of value he will be charged half the cost. Such breakage must be immediately reported to the manager.

Orchidin is the name applied by W. Poehl (*Chem. Zeit.*) to a preparation which has the advantage over "seignardin," the sterilized aqueous extract of the testicles, that it is free from albumen while it contains the entire quantity of leucomaine. Poehl exhausts the testicles in a percolator with water acidulated with hydrochloric acid, removes the albumen by the combined methods of Schmidt Mulheim and Armand Gauthier, and precipitates the leucomaine as a phospho-wolframic acid salt. This he decomposes with baryta, forms a double salt of the leucomaine with sodium chloride, dissolves in water and sterilizes. The preparation is easily decomposed, and is best preserved by sealing up in a 8 per cent. solution in glass tubes. It has been found harmless in subcutaneous injection.

## Some Specialty Formulas.

The following are taken from volume 45 of Hartleben's "Chemisch-Technische Bibliothek," which was compiled by C. F. Capann-Karlowa and bears the title "Chemisch-Technische Spezialitäten und Geheimnisse."

**Acme soap powder.**—Contains 58.47 parts of sodium carbonate, 26.1 parts of powdered soap and 15.89 parts of water.

**Antifer.**—For removing iron mold. Equal parts of oxalic acid and alum melted together at 12° C. and formed into cakes, which should be wrapped in paraffin-paper and then in tinfoil.

**Barmelit**, a preserving salt, is said to be composed of common salt, 49.95; boric anhydride, 27, and water of crystallization, 22.5 per cent. [Boric acid, 4 parts.—Ed.]

**Brilluntine** (fixative).—Olive oil, 1 kilo. (fl. 3xxxviii); spermaceti, 300 grammes (3xxx); oil of bergamot, 25 grammes (fl. 3j); oil of cloves, 3 grammes (3ss); French geranium oil, 10 grammes (3iij).

**Butter perfume.**—The flavorings usually sold for butter and cheese are said to owe their property to coumarin. Tincture of tonka bean, or a solution of coumarin in spirit and water serves the purpose.

**Butter powder.**—Bicarbonate of soda, with 1 per cent. of turmeric.

**Carbolineum substitute.**—Borax, 100 parts; caustic soda, 50 parts; water, 1,000 parts. Boil together, and while hot add shellac, 450 parts; carbolic acid (40–45 per cent.), 200 parts. Make a uniform mixture.

**Champion spice** is said to be composed chiefly of coarsely-powdered fenugreek seed, with coriander, caraway, anise and asparagus fruit, and a smaller proportion of drugs (barks and roots), which help to give the sweet and aromatic taste a slight astringency.

**Cognac essence.**—Ceanthie ether and ethyl nitrite, of each 30 grammes; oil of wine, 10 grammes; acetic ether, 120 grammes; diluted alcohol, 180 grammes.

**Furniture polish.**—Five hundred grammes of white wax is to be boiled with 2 liters of potash solution until it is of salve consistence and then colored with soot.

**Ink-extractor** (Perry's)—A pencil, the "lead" of which is made of fused oxalic acid.

**Japanese cleansing-cream.**—White olive-oil soap, 125 grammes (3ivss); strong solution of ammonia, 125 grammes (fl. 3v); alcohol, 60 grammes (fl. 3iiss); glycerin, 30 grammes (fl. 3j); ether, 60 grammes (fl. 3iii); water to 4 liters (Oviij). Dissolve the soap in a liter of hot water and when cold add the rest of the ingredients.

**Jetoline** is a black, indelible drawing ink. C. Jaebosen gives the following: I. Dissolve 8.52 grammes of crystallized copper chloride, 10.65 grammes of sodium chloride and 5.35 grammes of ammonium chloride in 60 grammes of distilled water and label. II. Dissolve 20 grammes of aniline chloride in 30 grammes of distilled water and add 20 grammes of a 50 per cent. solution of acacia, and 10 grammes of glycerin. Mix 4 parts of solution No. II with 1 part of solution No. I immediately before using.

**Kid-reviver** (for cleansing gloves).—This is made in paste form by heating together 300 parts strong chlorinated-lime solution, 30 parts ammonia solution, 450 parts soap shavings and 600 parts of water.

**Ladies' blacking.**—Glue, 125 grammes (3ivss); soft soap, 30 grammes (3j); logwood, 250 grammes (3ix); isinglass, 7.5 grammes (3ij); indigo, 8.5 grammes (3j); vinegar, 725 grammes (3xxv). Boil altogether over a gentle fire, restoring the

water lost by evaporation. Finally strain. [The glue appears to be largely in excess.]

**Melanin**, an indelible marking ink, is said to be a powder containing about 5 parts sulphate of copper, 6 parts chlorate of potassium, 6 parts sal ammoniac, 5 parts aniline hydrochlorate, and 5 parts of gum arabic.

**Rust-preventive composition**, made by Jones & Co., Sheffield, is a composition containing wax, fat, turpentine, and peroxide of iron to color it.

**Tobacco sheep-dip**—Tobacco, 15 kilos. (48 lbs.); sulphur, 5.5 kilos. (16 lbs.); lye, 1.5 kilos. (3½ lbs.); water, 50 kilos. (21 gallons). Boil the tobacco in the water, press and strain. To the infusion add the other ingredients.

**Washing and cleaning crystal.**—Carbonate of soda, with 1 or 2 per cent. of borax.

## Artificial Fruit Sugar.

By FRANK H. MASON,

U. S. Consul General at Frankfurt.

Among the recent chemical discoveries in Germany which would seem to possess a practical interest for those portions of the United States where the preservation of fruits has become an established industry, is a process by which fruit sugar may be manufactured from beet juice, as an improved product specially adapted to certain purposes.

The inventor is Dr. O. Follenius, director of the beet-sugar factories at Hamburg and at Hattersheim near Frankfurt. His invention has been patented in Germany (No. 35,487) and in some other European countries, but not thus far in the United States. The process consists, apparently, in the inversion of beet sugar at a certain stage of its manufacture, by chemical treatment, into what is technically designated "Lävulose" ( $C_6H_{12}O_6$ ), which is chemically identical with the natural fruit sugar developed in greater or less degree in most kinds of fruit—1.57 per cent in peaches, 6.36 per cent. in plums, 10.79 per cent. in sweet cherries and as high as 15 per cent. in some varieties of grapes. Fruit sugar differs, both in taste and chemical composition, from cane sugar, which latter belongs to the second group of saccharine substances, having the formula  $C_{12}H_{22}O_{11}$ .

The artificial fruit sugar manufactured by the Follenius process, is a limpid, white syrup, of great density containing from 75 to 76 per cent. of sugar, and possessing among other valuable qualities a rich, fruity flavor, as of natural fruit sugar, and the capacity to remain fluid and free from granulation for an indefinite period, notwithstanding its high degree of density. It is well known that ordinary white syrup containing, 65 per cent. or more of sugar, crystallizes and forms granular deposits, and when used for preserving fruits often "candies" to such a degree that the preserves have to be recooked to restore the desired smoothness and fluidity. The new artificial fruit sugar, on the contrary, remains smooth and fluid under all conditions.

But the quality which chiefly determines its commercial value is its power to assimilate, develop and preserve the natural aromatic flavor of the fruit to which it is applied as a preserving material. Confectioners, fruit packers, and skilled housekeepers who have tested it quite extensively during the past year in the preservation of cherries, strawberries, peaches, and various other fruits, pro-

nounce it far superior for such purposes to any other known form of sugar, and cite among its other advantages the fact that it is always ready for use, and eliminates wholly from the factory all incidental processes of dissolving and refining the syrup. Finally, it corrects the tendency so common in fruits preserved in ordinary sugar to soften and assume a crude, sugary flavor, which not only injures the color and appearance of the preserves, but renders them cloying and disagreeable to the taste.

Although of recent invention it is largely used in this country for perfecting wines, as well as in the manufacture of fine liquors, and is far superior to ordinary sugar for making lemonade or any preparation in which the saccharine principal is brought into contact with the acid juices of fruits. So far as it is known, its use has not been extended, even experimentally to the United States. It is made only at the sugar factory in Hamburg, where it is sold to the trade for \$7.14 per 100 kilograms, which would be equivalent to 8½ cents per American pound. As the manufacture of beet sugar is assuming important proportions in the United States, and the conservation of fruits in the forms of jams, jellies and preserves of various kinds is already established in Maryland, California and several other States, the field would seem to be open and ready for a trial of what is here considered a highly practical and important improvement. The first step should be, naturally, to ascertain by actual trial whether the new material possesses all the merits that are claimed for it.

## The Edible Mushrooms of The United States.

There has recently been issued from the Government Printing Office an important pamphlet entitled *Twelve Edible Mushrooms of the United States, with Directions for their Identification and their Preparation as Food*, by Dr. Thomas Taylor, Chief of the Division of Microscopy of the Department of Agriculture. The importance of the subject need not be insisted upon to the few who know how immensely superior the fresh American mushrooms are to those imported from Europe—as Mr. William Falconer of Glen Cove, N. Y., puts it, in a summary contained in Dr. Taylor's pamphlet of a paper read before the Massachusetts Horticultural Society for February. "Many persons who have used the tasteless, indigestible, putty-balls from imported cans will repudiate the foreign article and accept no other than the wholesome, toothsome and juicy domestic product." In this statement Mr. Falconer has reference to the time when, as he foresees, the production will have been so increased as to reduce the price from a fictitious to a popular basis. Dr. Taylor describes the following species: *Lactarius deliciosus*, *Cantharellus cibarius*, *Marasmius oreades*, *Hydnum repandum*, *Agaricus campestris*, *Coprinus comatus*, *Morchella esculenta*, *Clavaria cinerea*, *Clavaria rugosa*, *Boletus edulis*, *Lycoperdon giganteum*, and *Fistulina hepatica*. All these species are shown in colored lithographs and described sufficiently for their identification in the text, in which, moreover, directions are given for gathering, preserving and cooking each one. In an appendix the reader is instructed how to cultivate mushrooms, and Mr. Falconer's description of a new species, *Agaricus subrufescens*, is quoted.

## The Nucleins and Nuclein Therapy.

In an address delivered before the Illinois State Medical Society by Dr. Victor C. Vaughan of Ann Arbor, he says that recent investigations have indicated that a knowledge of the nucleins would probably be of service to practitioners, as some of them promise to be of therapeutical value. Miescher was the first to study the nucleins with a fair appreciation of their importance, and it was he who named them. The corpuscles from pus were obtained by the addition of a dilute solution of sodium sulphate, subsidence, and decantation. Then they were digested with pepsin and hydrochloric acid so long as peptones were formed; this left the nuclei of the cells. These were found to be rich in phosphorus and soluble in dilute alkalis. From the alkaline solution the substance is precipitated by dilute acids. The viability of the nuclein molecule and its power of recuperation after partial decomposition have been demonstrated by Miescher, and it has been shown that certain organic and inorganic bases may be placed within or drawn from the nuclein molecule without any visible modification of the character of the substance. Hoppe-Seyler has prepared nucleins from yeast; Lubavin from casein; Ploetz, from the nuclei of the blood-corpuscles of birds, and Miescher from the yolks of eggs.

Dr. Vaughan and others have experimented with nuclein obtained from yeast, eggs, the spleen, the thyroid gland, and the testes, and all of them have been found to be distinctly bactericidal. They have also demonstrated that the germicidal constituent of blood serum is a nuclein which is undoubtedly furnished by the multinuclear white corpuscles. When it had been shown that the nucleins were germicidal, it remained to be seen whether or not they might be used to prevent or arrest the growth of germs in the animal body. The author gives a long and comprehensive account of his experiments with rabbits and guinea-pigs in which he used a solution containing about two per cent. of yeast nuclein, and from the results obtained he draws the following conclusions:

1. Rabbits and guinea pigs may be protected against virulent cultures of the diplococcus of pneumonia by previous treatment with hypodermic injections of a solution of yeast nuclein.

2. The immunity thus secured is not directly due to the action of the nuclein as a germicide.

3. The process of this immunity is an educational one, and depends upon the stimulating effect of the nuclein upon an organ whose function it is to protect the body against bacterial invasion.

4. The longer the use of the nucleins is continued and the more frequently they are administered, the more complete is the immunity obtained.

5. In order to obtain this immunity, inoculation with the germ must follow soon after the last treatment with the nuclein.

Dr. Vaughan has also made some attempts to produce immunity from tuberculosis in guinea pigs, but so far the results have not been altogether satisfactory, and in some cases they have been contradictory. He believes the nucleins to be entirely free from poisonous properties. He has injected subcutaneously in a man an ounce and a half of a two per cent solution of yeast nuclein at a time without any effect except the temporary irritation produced by so much fluid being injected, and he has also given

from six to eight ounces of the same solution by the mouth during twenty-four hours without any bad effect. In some persons, however, a much smaller dose might cause a marked elevation of temperature. For instance, in one patient, a large and apparently robust man who was suffering from muscular rheumatism, and in whom tuberculosis of the neck of the bladder had recently been detected, a hypodermic injection of forty drops of the two per cent. solution of yeast nuclein caused the temperature to rise from two to four degrees. In a few cases the injection of eighty drops or more has been followed by a chill and an elevation of the temperature, and a redness like that of erysipelas has appeared and lasted for about twenty-four hours.

In tuberculous patients the effect of repeated injections has been a lowering of the temperature. Dr. Vaughan has used daily injections of the nuclein for six months or more without observing any injurious effects from their continuous use. In twelve cases of membranous amygdalitis he employed the nucleins alone with good results, the fever disappearing within twenty-four or forty-eight hours at the most. In four cases of streptococcus diphtheria good results were also obtained from their employment. Still another case where it was used successfully was that of a man who had been under treatment for an indolent ulcer of the leg. After other measures had been tried, the nuclein was used alone, and eighty minims of a two per cent. solution of yeast nuclein were injected into the tissues around the ulcer. Eight injections were made and the ulcer healed perfectly. Two months have passed since the last treatment and there has been no return of the trouble.

The action of the nucleins in giving immunity from pneumonia germs is not due to its direct germicidal effect, and the author says that we must look for curative agents in one or the other of the following classes: 1. Non-poisonous germicides of cellular origin. 2. Substances which stimulate the activity of the organs whose function it is to protect the body against these diseases. While there are in the nucleins substances of the first class, he believes that the nucleins belong also to the second class. The phagocytic theory, he says, teaches that the multinuclear white corpuscles are the natural defenders against bacterial invasion, and if the nucleins are to prove of any value in the treatment of tuberculosis, it will probably be due to the fact that they increase the multinuclear white corpuscles. However, the author thinks that it is only in recent cases that any benefit may be expected, and even in regard to these there must be more abundant material and a longer experience in order to speak with any certainty.

## The Aniline Stains.\*

DR. SMITH ELY JELLIFFE.

The order of description in the main is: The name of the preparation which is more commonly used (in histological and pathological work), its synonyms, the appearance of the dye in the rough, solubility in water and alcohol and its behavior with acids and alkalis.

ALKALI BLUE. Nicholson Blue. Soluble Blue. Soluble Aniline Blue. A light or dark blue powder. Difficulty soluble in cold; more readily soluble in warm water. In alcohol somewhat soluble. HCl

to watery solution, blue precipitate. NaOH to watery solution, red brown solution. Concentrated H<sub>2</sub>SO<sub>4</sub> soon brownish red. Dilution with water, blue.

AURANTIA. Kaiser yellow.

Reddish brown crystals.

Soluble in water, with orange yellow color.

BISMARCK BROWN. Manchester Brown. Phenylene

Brown. Vesuvium. Aniline Brown. Cannel.

English Brown.

Dark brown powder.

Soluble in water with brown color. HCl to watery

solution, no change. NaOH to watery solution,

brownish precipitate. H<sub>2</sub>SO<sub>4</sub> Conc. brown solution.

Dilution with water, red.

DAHLIA. Hofmann's Violet. Iodine Violet. Primula.

Red Violet 5 R, extra. Violet 5 R. Violet R.

Violet RR.

Two qualities (a) Reddish and (b) Violet.

(A). Green crystalline powder. In water soluble

with fuchsin red color. HCl to watery solution,

yellowish brown color. NaOH to watery solution,

brown precipitate. H<sub>2</sub>SO<sub>4</sub> Conc. yellowish brown

solution. Dilution with water, no change.

(B). Shining green pieces. In water, easily soluble

with blue violet color. HCl to watery solution, first

green then yellow. NaOH to a watery solution,

brownish red precipitate. H<sub>2</sub>SO<sub>4</sub> Conc. brownish yellow

solution. Dilution with water, at first olive

green, then green, then blue.

CYANIN. Chinolin Blue.

Green shining crystals.

In water insoluble in cold; by heating with difficulty

soluble with a violet blue color. HCl to a watery solution,

decolorization. NaOH to a watery solution;

cold, a bluish bronze like precipitate; warm, a brownish

precipitate. H<sub>2</sub>SO<sub>4</sub> concentrated, colorless.

Dilution with water, colorless.

EOSIN. Eosin A. Eosin GGF. Water Soluble Eosin.

Eosin B.

Reddish, blue shining crystals or brownish powder.

In water, easily soluble with bluish red color; the

diluted solution shows a greenish fluorescence. In

alcohol readily soluble with bluish red color and yellowish

green fluorescence. HCl to watery solution,

yellowish red floculi. NaOH to watery solution, no

change. H<sub>2</sub>SO<sub>4</sub> Conc. yellowish solution. Dilution

with water, yellowish red precipitate.

FUCHSIN. Rubine. Magenta. Aniline Red. Roscin.

Found as Chlorhydrate, Acetate, Nitrate and Sul-

phate.

As Chlorhydrate, Cantharides like shining crystals.

As Acetate, irregular green shining pieces. As Sul-

phate, fine green shining crystalline powder.

In water, soluble with red color. In alcohol solu-

ble with red color. HCl to watery solution, yellowish.

NaOH to watery solution, decolorization. H<sub>2</sub>SO<sub>4</sub> Conc. yellowish brown solution. Dilution with

water, nearly colorless.

FUCHSIN. S. Acid Fuchsin. Rubine S. Acid Rubine.

Acid Magenta.

Metallic green shining grains or powder.

In water, soluble with bluish red color. In alcohol

insoluble. HCl to watery solution, no change.

NaOH to watery solution, complete decolorization.

H<sub>2</sub>SO<sub>4</sub> Conc. yellowish solution. Dilution with

water, gradually red.

INDULIN. Indulin N N. Nigrosin sol. in water.

True Blue R. True Blue 3 R.

Indulin, bronze shining powder. Nigrosin, black

shining fragments.

In water, soluble with a blue violet color. In

alcohol, blue solution. HCl to watery solution, be-

comes more blue. NaOH to watery solution, brown

ish violet precipitate. H<sub>2</sub>SO<sub>4</sub> Conc. blue solution.

Dilution with water, violet solution.

IODINE GREEN. Night Green. Metternich's Green.

Vert lumiere.

Hard dark green pieces.

In water, easily soluble with a bluish green color.

HCl to watery solution, reddish yellow color. NaOH

to watery solution, colorless. H<sub>2</sub>SO<sub>4</sub> Conc. soluble

with reddish yellow color. Dilution with water,

weak yellowish green.

METHYL BLUE. Brilliant Cotton Blue. Methyl

water Blue.

A dark blue powder.

In water, soluble with a blue color. HCl to a

watery solution, no change. NaOH to a watery

solution, a reddish brown solution. H<sub>2</sub>SO<sub>4</sub> Conc.

soluble with red brown color. Dilution with water,

a blue solution.

METHYL GREEN. Paris Green. Vert Etincelle.

Light Green. Green of Methyl Aniline. Double

Green. Green Powder.

Green Crystals.

In water, easily soluble with bluish green color.

Insoluble in Amyl alcohol. HCl to watery solution,

yellowish red color, which becomes yellowish green

on addition of water. NaOH to watery solution,

becomes colorless. H<sub>2</sub>SO<sub>4</sub> Concentrated soluble

with yellowish red color. Dilution with water, yellowish

green solution.

METHYL VIOLET B. Paris Violet. Direct Violet.

Violet of Methyl Aniline. PYOKTANIN.

Metallic green shining fragments or powder.

In water, soluble with violet color. Alcohol, solu-

ble, also in amyl alcohol. HCl to watery solution,

at first green then on addition of more acid, deep

golden brown solution. NaOH to watery solution,

brownish red color and precipitate. H<sub>2</sub>SO<sub>4</sub> Conc.

yellow. Dilution with water, yellowish green, then

bluish green, finally violet.

There is another Methyl Violet. 6 B. Benzyl

Violet. Paris Violet. 6 B. that comes in metallic

brownish shining fragments or powders. Its reac-

tions are identical with Methyl Violet B.

**METHYLEN BLUE.** B. B. G. B. B. in powder extra D. Methylen Blue. B. B. in powder extra. Aethylen Blue.

Dark blue or reddish brown, bronze shining powder.

In water, easily soluble with blue color. In alcohol soluble. HCl to watery solution, no change. NaOH to watery solution, violet color. Much concentrated NaOH produces a dirty violet precipitate.  $H_2SO_4$  concentrated golden green solution. Dilution with water, blue solution.

**PICNIC ACID.**

Pale yellowish crystals.

In water, with difficulty soluble in cold, more readily soluble in warm water. Soluble in alcohol. Benzol: melts at 122.5 and has a bitter taste. With Potass. Cyanide, a brown solution.

**SAPFRANIN.** Safranin T. Safranin Extra G. Safranin S. Aniline Rose. Old name Pink.

Red brown powder.

In water, soluble with red color. In alcohol, red solution with yellowish red fluorescence. HCl to a watery solution, blue violet solution. NaOH to watery solution, brownish red precipitate. Conc.  $H_2SO_4$  green solution. Dilution with water, from blue passing to red.

about a quarter of an hour the etching operation is complete, when the plate is washed, dried and a proof in printing ink obtained.

**Preservatives.** W. B. N.—Salicylic acid is the substance most usually employed for keeping fruits and 8 grains to the pint is considered sufficient. Glacialine is recommended for the preservation of dairy products—milk, butter, etc. It consists of a mixture of boric acid, borax, sugar and glycerin rubbed to a dry powder. Following is the formula:

	Parts.
Boric acid.....	18
Borax.....	9
Sugar.....	9
Glycerin.....	6

Rub to a dry powder.

**Non-Intoxicating Stimulants, etc.** W. B. N.—Would like to know whether there are any preparations without intoxicating effects which might be used to replace alcohol as a stimulant, antiseptic or preservative.

We do not know of any single substance which can be used to replace alcohol in all the applications mentioned. The use of alcohol can be dispensed with, however, in the several indications, if necessary. Infusion of digitalis or some similar heart stimulant is frequently used for increasing the force and frequency of the heart's beats and is regarded as a very certain method of stimulating a person weakened by disease. But as you must know, the action of drugs of this kind is limited. As an antiseptic or preservative alcohol is easily replaced, and if you will mention the particular application we shall be pleased to furnish a formula.

**To Detannate Sherry Wine.**—E. B. Co. write: "Please advise us if you can how we should proceed to detannate sherry wine."

Premising that the quantity to be detannated amounts to one pint make a mixture composed as follows:

Solution of tersulphate of iron.....	4 ounces
Water of ammonia.....	4 ounces

Dilute the water of ammonia with four times its bulk of water and to the solution which will now measure twenty ounces add the solution of tersulphate of iron, previously diluted with 26½ fluid ounces of water. Pour this mixture upon a wet muslin strainer and when the liquid has drained off return the precipitate and mix it intimately with 44 fluid ounces of water. Again drain it on a strainer, transfer it once more to the vessel and treat it as before, finally drain and press the precipitate on the strainer until it weighs 5½ ounces.

The precipitate thus obtained consists of ferric hydrate, one of the best detannating agents known to the pharmacist. All that is necessary now is to add the moist precipitate of iron to the sherry wine contained in a suitable vessel; then agitate the mixture frequently until the wine is freed from tannin, which may be known by the absence of a blackish-green color when a small portion of the clear wine is treated with a drop or two of tincture of chloride of iron.

The above process may be modified to suit different wines. As outlined above it is particularly adapted for wines that are rich in tannin.

Wines may be freed from tannin in a small way by either the addition of milk or gelatine and the amounts necessary are best determined by experiment.

**Hard Tooth Soap.**—T. R., writes: "I have gained many valuable points from

your interesting "Notes and Queries" column and now write to ask a formula for a tooth soap that can be economically prepared by a pharmacist. If you can give me formulas for both hard and soft tooth soaps, please do so."

There is no special difficulty connected with the manufacture of hard tooth soap. The formula given below will produce a satisfactory preparation.

Precipitated chalk.....	2 drams
Carmine.....	3 grains
Powdered soap.....	5 drams
Oil peppermint.....	10 drops
Alcohol.....	45 minima

Triturate the carmine with a few drops of ammonia water and add the precipitated chalk. Dissolve the oil of peppermint in the alcohol; add the solution to the soap contained in a mortar and thoroughly incorporate; then add the precipitated chalk and when the whole is homogeneous transfer to suitable molds and dry.

**Phosphorus Pills.**—F. H. P. seeks the best excipient for the following pill:

	Grammes.
Phosphorus.....	0.6
Potass. chlor.....	1

M.—Ft. pill No. lxx.

Luther F. Stevens of Brooklyn states that the dose is much too large for steady use as would seem indicated by the number of pills ordered; 0.06 is more probable. However upon the basis given:

	Grammes.
Phosphorus.....	0.6
Potass. chlor.....	1
Carbon bisulphide.....	6. Cc.
Fuller's earth.....	2
Cacao butter.....	2
Althæa.....	3

Cut the sixty centigrammes of phosphorus from a clear portion of a stick, handling while still damp from the water in which it is kept, and place in a test tube or homeopathic vial of 8 or 10 Cc. capacity, add the bisulphide of carbon, dissolve by agitation and pour into a pill mortar, allow the solvent to nearly all evaporate, then dust in the powdered Fuller's earth which will absorb the now concentrated solution, and quickly upon this the cacao butter scraped very fine and thin, and mix the whole gently with a spatula.

Intimately mix the powdered potassium chlorate and powdered althæa, then work the two lots together with glycerite of tragacanth or of starch to form a mass. By this procedure the phosphorus is much better distributed and is withheld from oxidation by the fat; if coated with gelatin or capsuled the keeping qualities will be much enhanced, the gelatin being superior to the U. S. P. covering of tolu, and as easily applied.

When other materials are used with phosphorus which would make a good sized pill, much of this filling may be left out, if the amount of phosphorus is reduced, the solvent, Fuller's earth and cacao butter should be also, and althæa increased to give any convenient size for rolling out.

**What is the Difference Between an Alkaloid and a Salt?** T. H. P.—A salt is formed when an alkali and an acid are brought together like tartaric acid and sodium bicarbonate or ammonia and hydrochloric acid. Quinine and morphine are bitter principles from plants which act as *alkalies* when added to an acid. Quinine is almost insoluble, so its muriate, sulphate, hydrobromide and many other salts are used.

## Queries and Answers.

*We shall be glad, in this department, to respond to calls for information bearing on pharmacy or any of its allied topics, and cordially invite our friends to make use of this column.*

*When sending for the formula of an unusual, patented or proprietary compound, the query should be accompanied with information regarding the locality in which it is used, its uses, and reputed effect. When it can conveniently be done, a specimen of the label used on packages of the compound should also be sent.*

**Yellow Leather Dressings.** H. A. B.—Consult recent members of this journal. We append below some formulae of recent construction taken from Dieterich's Manual. Also see page 840 of this issue.

	Parts.
Yellow wax.....	100
Fish oil.....	100
Benzine.....	730
Tincture of green soap.....	50
Yellow ochre.....	20

Brown or black leather dressings may be made by substituting for the yellow ochre brown umber and lampblack according to the color desired.

**Photo-engraving.** T. L.—This is an exhaustive subject and we can only give you a simple example of a process which has been recently made public. The process alluded to is intended to furnish a photo-etching on copper and is useful on account of its simplicity.

A polished copper plate is sensitized with the following solution:

Fish glue.....	2 ounces.
Albumen.....	2 ounces.
Water.....	4 ounces.
Ammonium bichromate.....	60 grains.

The plate is then placed on a whirler so as to produce evenness of coating and remove the superfluous solution. After drying, the plate is ready for exposure under the negative, which, of course, has been associated in the camera with a lined screen. The exposure necessary for a copper plate prepared in the way described is about two minutes to direct sunlight. Development is brought about by simple washing in water, which dissolves out the coating solution where the light has not acted. The plate is next strongly heated until the coating assumes a brown color. For this purpose an iron plate is used which is heated from below with a powerful Bunsen burner. After cooling, the plate is put into an ordinary porcelain developing dish and covered with an etching solution of perchloride of iron (strength 80° Baume). At the end of



## Correspondence.

## The Cutter and The Remedy.

Editor of AMERICAN DRUGGIST:

DEAR SIR: The paper entitled "The Cutter and the Remedy," will doubtless attract wide attention, but a careful perusal of it fails to impress me with the idea that either of the remedies proposed would have any effect on the prices at which proprietary goods are sold to consumers.

In all the articles on the cut-rate problem that I have read one most important factor appears to have been left out of consideration, viz., "the great American public." It has been said that the Englishman dearly loves a lord, whether this is true or not I do not know, but that it is a fact that the American woman loves a bargain, can be abundantly proved by a visit to any of the large dry goods stores in our leading cities on what is called a bargain day. With this fact in mind, it follows that whenever a dealer advertises an article, proprietary or otherwise, at a price below that which his competitors are selling at, he will naturally and inevitably attract buyers to his store.

The only practical method of dealing with the cut-rate question is, it seems to me, that recently adopted by the Interstate Druggists' League, although I am in doubt whether that plan can become a success in the largest cities, but that it will work in the smaller cities and country districts is, I believe, not open to question.

The League plan contemplates the establishment of rates at which proprietary medicines are to be sold in each city or district with the understanding that when any of the articles on the list are offered at a lower figure by any of the members, or by a newcomer, the selling price will be reduced to correspond by all alike. Upon some such basis as the above I believe the cut-rate evil can be kept within bounds; but that the American people will consent to bolster up prices by legislation in this age of anti-monopoly and anti-trust agitation, is, I think, not to be expected.

OBSERVER.

New York, June 23, 1894.

## The Texas Pharmacy Act.

Editor AMERICAN DRUGGIST:

Notwithstanding the innumerable pharmacy boards, the pharmacy law of Texas is weak and lacks soundness, nor does it conform with professional principles; you are indeed quite right in quoting this point.

We entertained the subject of the sale of poisons so indiscriminately carried on in this (and many other Texas cities) reckless "dishing out" of morphine and cocaine, etc., packages unlabelled, etc., selling to minors and irresponsible persons. However, when the subject was proposed to petition the council of Dallas to enact such a law, it was promptly "downed" by a number of members from whom more was expected.

RICH'D SCHWEICKHARDT.

DALLAS, TEX.

## CAMPBOR-IRON PILLS.

[Kampherisen EDLSEN, *Berl. Klin. Woch.*]  
 Ferri reduct. .... 6 grammes  
 Camphore pulv. .... 6 grammes  
 Ext. gentiane ..... 5 grammes  
 Acacia pulv. ....  
 Aqua qs. ft. pil. No. 90.

Give two or three pills three times a day for anemia and chlorosis.

## Quiz Box.

This series of questions will be continued each issue. The answers to each series of questions will appear in the second issue following their publication. All of our readers are invited to compete for the prizes named below.

Replies must be in our hands within three weeks after the appearance of the questions. The names of all making an average of 75 per cent. will be published.

Address Editor Quiz Box, 37 College place, New York.

FIRST PRIZE.—A new Dispensatory, latest revised edition, will be awarded to the person who makes the highest general average of answers for the entire series of questions as published from July 10 to December 25 1894.

SECOND PRIZE.—Copies of Harrop's "Monograph on Flavoring Extracts" will be awarded to the three persons who make the next highest general average for the entire series of questions.

THIRD PRIZE.—A copy of Oldberg's Home study of Pharmacy will be awarded to the person sending in the most satisfactory replies to any three sets of questions, but who does not win either of the other prizes.

## Answers to Questions; Series 12.

131. Allotropism is the property of existing in two or more conditions which are distinct in their physical or chemical relations. e.g. carbon, which exists as diamond, graphite and charcoal, all differing as regards color, specific gravity, hardness, etc., and which have but slight resemblance to each other, but which, when burnt in oxygen, all give the same weight of carbon dioxide, thereby proving their identity.

132. The terminations *-ous* and *-ic* are used to indicate the degree of oxidation of metals, etc.; *-ous* designating the lower oxide and *-ic* the higher one. Thus ferrous oxide is FeO and ferric oxide, Fe<sub>2</sub>O<sub>3</sub>. Also applied to acids, as sulphurous acid (H<sub>2</sub>SO<sub>3</sub>), contains less oxygen than sulphuric acid (H<sub>2</sub>SO<sub>4</sub>). The terminations *-ite* and *-ate* are used to distinguish between the salts of acids of different degrees of oxidation. Thus, the salts of acids ending in *-ous* terminate in *-ite*, while those derived from acids in *-ic* end in *-ate*, e.g., nitrous acid forms nitrites, nitric acid, nitrates.

Prefixes are used for the same purpose as suffixes, but, while suffixes do not, necessarily, give any idea of number the prefixes mono, di, tri, tetra and penta mean, respectively, one, two, three, four and five. Thus, H<sub>2</sub>O is the monoxide of hydrogen and H<sub>2</sub>O<sub>2</sub> is the dioxide of hydrogen, also called the per oxide because it is the higher oxide.

Antimony has two chlorides, the lowest SbCl<sub>3</sub>, called the antimonous or tri chloride, or butter of antimony. It also has two sulphides, the highest of which has 5 sulphur atoms and is called the penta sulphide (golden sulphide). Sodium pyrophosphate (P<sub>2</sub>O<sub>5</sub>.Na<sub>2</sub>), is called tetra sodium phosphate since it has 4 atoms of sodium to the molecule.

133 Atomic weights according to Clarke.

Aluminum, Al	27.0	Neodymium, Nd	140.5
Antimony, Sb	120.0	Nickel, Ni	58.7
Arsenic, As	75.0	Nitrogen, N	14.03
Barium, Ba	137.0	Osmium, Os	190.8
Bismuth, Bi	208.9	Oxygen, O	16.0
Boron, B	11.0	Palladium, Pd	106.6
Bromine, Br	79.95	Phosphorus, P	31.0
Cadmium, Cd	112.0	Platinum, Pt	195.0
Caesium, Cs	132.9	Potassium, K	39.1
Calcium, Ca	40.0	Praseodymium, Pr	143.5
Carbon, C	12.0	Rhodium, Rh	103.0
Cerium, Ce	140.2	Rubidium, Rb	85.5
Chlorine, Cl	35.45	Ruthenium, Ru	101.6
Chromium, Cr	52.0	Samarium, Sm	150.0
Cobalt, Co	59.0	Scandium, Sc	44.0
Columbium, Cb	94.0	Selenium, Se	79.0
Copper, Co	63.6	Silicon, Si	28.4

Erbium, Er	166.3	Silver, Ag	107.92
Fluorine, F	19.0	Sodium, Na	23.05
Gadolinium, Gd	156.1	Strontium, Sr	87.6
Gallium, Ga	69.0	Sulphur, S	32.06
Germanium, Ge	72.3	Tantalum, Ta	182.6
Glucinum, Gl	9.0	Tellurium, Te	125.0
Gold, Au	197.3	Terbium, Tb	160.0
Hydrogen, H	1.007	Thallium, Tl	204.18
Indium, In	113.7	Thorium, Th	232.6
Iodine, I	126.85	Thulium, Tu	170.7
Iridium, Ir	193.1	Tin, Sn	119.0
Iron, Fe	56.0	Titanium, Ti	48.0
Lanthanum, La	138.2	Tungsten, W	184.0
Lead, Pb	206.95	Uranium, U	239.6
Lithium, Li	7.02	Vanadium, V	51.4
Magnesium, Mg	24.3	Ytterbium, Yb	173.0
Manganese, Mn	55.0	Yttrium, Yt	89.1
Mercury, Hg	200.0	Zinc, Zn	65.3
Molybdenum, Mo	96.0	Zirconium, Zr	90.6

134. The line of demarcation between metals and non-metals is not very well defined; the division is purely arbitrary. But one distinguishing feature of a metal is its disposition to form a base by combining with oxygen, or a salt by combining with a halogen.

135. Scheele discovered and showed that atmospheric air was composed of a mixture of two different gases, only one of which is capable of supporting combustion and respiration. This constituent, oxygen, was discovered by Priestley, August 1, 1774, who, by heating mercuric oxide by means of the sun's rays, decomposed it into oxygen and metallic mercury. This discovery enabled Lavoisier to put forward the true theory of combustion, and to the body capable of supporting this combustion he gave the name of "oxygène," from the fact that the products of combustion are frequently of an acid nature. Oxygen is a colorless, invisible, tasteless and inodorous gas; it has a sp. gr. of 1.10568 (air = 1), or 16 when H. is taken as the unit. The true combining weight is 16, and a liter of the gas at 0°C and 760 mm. mercury weighs 1.43028 grammes (Regnault). Oxygen dissolves appreciably in water. Some metals, when in the molten state, absorb oxygen and give it off again on cooling, e.g., silver. When a glowing chip of wood is plunged into a jar of oxygen gas it (the wood) ignites with a slight detonation; and metals which oxidize only slowly in air burn brilliantly in O. gas. Thus a watch spring tipped with S. ignited and plunged into a jar of O. burns easily and brilliantly. Substances like S. and P., which ignite readily in air, burn very brilliantly in O.

136. The usual process for obtaining hydrogen is by the action of dilute sulphuric acid on metallic zinc: H<sub>2</sub>SO<sub>4</sub> + Zn = ZnSO<sub>4</sub> + H<sub>2</sub>.

137. Almost all the sulphur of commerce comes from Italy; principally from the volcanic districts of the island of Sicily, where it occurs in wide spread masses extending over whole provinces. The deposits occur in the tertiary formations, native sulphur lying imbedded in a matrix of marl, limestone, gypsum and celestine, sometimes in transparent yellow crystals, but mostly in opaque crystalline masses. Both varieties are separated from the matrix by simple fusion. By far the most important commercial use of sulphur is in the manufacture of sulphuric acid for fertilizers, etc.

138. (1) Hypophosphorous acid (H<sub>3</sub>PO<sub>2</sub>) is formed by boiling P with barium hydroxide, 3 Ba (OH)<sub>2</sub> + P<sub>4</sub> + 6H<sub>2</sub>O = 8 Ba (PH<sub>2</sub>O<sub>2</sub>) + 2PH<sub>3</sub>. To the clear filtered solution add the requisite quantity of sulphuric acid, to remove Ba, filter and evaporate the clear solution to syrupy consistency.

Distinctive Reactions: (a) When perfectly dry hydrogen iodide is passed over hypophosphorous acid a violent reaction takes place, accompanied by great rise of temperature. The products are phosphorous acid and phosphonium iodide.

(b) Dry  $\text{SO}_2$  reacts with hypophosphorous acid as follows:  $2\text{PH}(\text{OH})_2 + \text{SO}_2 = 2\text{H}_2\text{PO}_3 + \text{S}$ , the chief products being phosphorous acid and free S.

(c) Nascent H does not act on either hypophosphorous acid or on its alkaline salts.

(2). Phosphorous acid,  $\text{P}(\text{OH})_3$ , is formed by the decomposition of the trichloride with water:  $\text{PCl}_3 + 3\text{H}_2\text{O} = \text{P}(\text{OH})_3 + 3\text{HCl}$ .

Distinctive Reactions: (a) Heat equal volumes of the acid and of a solution of corrosive sublimate (1 to 60) to about  $80^\circ\text{C}$ . White opalescence or ppt. shows  $\text{P}(\text{OH})_3$ . [Pagel.] (b) Phosphorous acid with excess of  $\text{A}.\text{NO}_3$  solution, 1 molecule  $\text{H}_2\text{PO}_3$  reduces one atom of silver, while H is set free. (c) An excess of  $\text{H}_2\text{PO}_3$  with a solution of cupric sulphate decolorizes the solution, cuprous oxide being formed. When cupric sulphate is in excess, Cu is separated after boiling for some time and one atom of Cu is reduced for every three atoms of phosphorous.

(3). Hypophosphoric acid,  $\text{H}_2\text{P}_2\text{O}_6$ , is best obtained by treating the lead salt,  $\text{PbH}_2\text{P}_2\text{O}_6$ , suspended in water with  $\text{H}_2\text{S}$ , and evaporating the filtered liquid to syrupy consistency.

Characteristic Reactions: (a) It is perfectly stable in aqueous solution, not effected by strong acids in the cold, but decomposed on boiling with sulphuric or nitric acid into phosphorous and phosphoric acids. (b) Is not oxidized by hydrogen peroxide and is not affected by potassium chromate, chlorine or iodine, even at a boiling heat. (c) Neither does it reduce mercuric, auric or platinum chloride. (d) It produces in a silver solution a white ppt., which does not blacken on boiling. (e) The solution is oxidized by potassium permanganate into phosphoric acid. (f) It is not effected by  $\text{H}_2\text{S}$ ,  $\text{SO}_2$  or nascent hydrogen.

4. Phosphoric acid (ortho-),  $\text{PO}(\text{OH})_3$ , is best prepared by heating red phosphorus in a retort with strong nitric acid and a little bromine, or bromine and iodine together, whereby phosphorus pentabromide is first formed, and then decomposed by the water present into hydrobromic and phosphoric acids,  $\text{PBr}_3 + 4\text{H}_2\text{O} = 5\text{HBr} + \text{H}_3\text{PO}_4$ . The hydrobromic acid thus formed is immediately decomposed by  $\text{HNO}_3$ , yielding free bromine, nitrogen dioxide and water:  $6\text{HBr} + 2\text{HNO}_3 = 6\text{Br} + 4\text{H}_2\text{O} + 4\text{H}_3\text{O} + (\text{NO})_2$ .

On a large scale, commercial ortho-phosphoric acid is prepared from bone ash by treatment with dilute  $\text{H}_2\text{SO}_4$ ; the clear filtered solution is then evaporated to a small bulk. On addition of strong  $\text{H}_2\text{SO}_4$ , the lime, still present, is precipitated as sulphate; the clear solution is then poured off and evaporated to dryness and freed from excess of  $\text{SO}_3$  by ignition.  $\text{Ca}_3(\text{PO}_4)_2 + 2\text{H}_2\text{SO}_4 = \text{CaH}_2(\text{PO}_4)_2 + 2(\text{CaSO}_4) + \text{CaH}_2(\text{PO}_4)_2 + \text{H}_2\text{SO}_4 = 2(\text{H}_3\text{PO}_4) + \text{CaSO}_4$ .

Metaphosphoric acid,  $\text{HPO}_3$ , is best obtained by passing a current  $\text{H}_2\text{S}$  of gas through a solution containing lead metaphosphate in suspension, filtering and evaporating the clear solution *in vacuo* over strong sulphuric acid. It is also obtained by heating orthophosphoric acid to redness or until no further water is given off. Upon exposure to the air or upon heating its solution it is changed to orthophosphoric acid. Metaphosphoric acid is distinguished from the ortho- or pyrophosphoric acid in that it produces white precipitates in solutions of calcium and barium chlorides, also in solution of albumen.

Pyrophosphoric acid,  $\text{H}_4\text{P}_2\text{O}_7$ , is ob-

tained by heating ortho-phosphoric acid for a considerable length of time to a temperature of  $215^\circ\text{C}$ . It is also formed when equal molecules of ortho- and metaphosphoric acids are brought together on a water bath,  $\text{H}_2\text{PO}_4 + \text{HPO}_3 = \text{H}_4\text{P}_2\text{O}_7$ . The best way to obtain it pure is by decomposing the lead salt acids by  $\text{H}_2\text{S}$  and evaporating *in vacuo* over  $\text{H}_2\text{SO}_4$ . It is changed to ortho-phosphoric acid by heating with strong acids.

Distinctive Reactions: Pyro-phosphoric acid is soluble in water. It may be distinguished from the ortho- variety by (a) its producing with slight excess of  $\text{NH}_4\text{HO}$ , a white granular precipitate with  $\text{AgNO}_3$ , while the ortho- modification produces a yellow precipitate. The most reliable test for phosphoric acid is to add to the nitric acid solution an excess of ammonium molybdate in nitric acid ("molybdic solution") and warm slightly when a yellow precipitate will be produced.

139. The halogens are the four elements, chlorine, bromine, iodine and fluorine; so called from their tendency to produce salts resembling sea-salt. Each of these elements combines with an equal volume of hydrogen to form an acid which occupies the joint volumes of its constituents. Their equivalent weights also represent their atomic weights. So they are monatomic elements. Their atomic weights follow the inverse order of their chemical energies. The compounds of these elements with hydrogen are all gases distinguished by a powerful attraction for moisture and a great similarity of odor. Their potassium salts all crystallize in the same (cubical) form.

140. By Marsh's test.

Mirror or Crust of Arsenic. Mirror or Crust of Antimony.

1. Is deposited at a little distance from the flame.
2. An arsenical stain is in two portions, one brownish, the other a glittering black.
3. On heating, it is rapidly volatilized as arsenious acid.
4. On transmission of a stream of  $\text{H}_2\text{S}$ , while immediately behind the stain a gentle heat is applied, the As. is changed to yellow sulphide; if dry HCl is now transmitted, the arsenical sulphide is unchanged.
5. Chloride of lime solution dissolves the As. completely.
6. Proto chloride of tin has no action on mit. As.
7. Dissolved in aqua Regia and treated with tartaric acid, ammonia and magnesia mixture, gives a precipitate of mmonio-magnesia arseniate.
1. Is deposited close to the flame, and on both sides of it.
2. The stain is tolerably homogeneous and usually has a tin like luster.
3. Volatilization very slow; no crystalline sublimate.
4. The same process applied in the case of antimony produced the range or black sulphide; and on passing HCl, chloride of antimony volatilizes without the application of heat.
5. Animony not affected.
6. Dissolves slow but completely the antimony stain.
7. No precipitate with antimony.

### Names of Students Whose Grade Stood 75 on the Twelfth Series.

E. Q. Anwalt, Philadelphia.  
James Banks, Mifflintown, Pa. H. J. Barber, Alton, Ontario, Canada. J. C. Boyer, Wisconsin, Pa. T. H. Breneman, Harrisonburg, Va. W. E. Bruce, Boston, Mass. J. W. Brewer, Lake Ponstent, S. Dak. G. E. Barksdale, Richmond, Va.  
Miss Maude Florence Cain, Lancaster, Pa.  
J. C. Dague, Fredericktown, Ohio. F. L. Dolan, Freeman, Mo. T. J. Derrberry, Centerville, Tenn.  
H. J. Force, Newark, N. J.  
William E. Gokay, Bennington, Vermont. Max A. Goltz, Winona, Minn.  
Frank Hartmann, Middletown, Conn. Frank L. Harwood, Warren, Mass. Seymour Hull, Hoosick Falls, N. Y. G. C. Hodges, Utica, N. Y. Chas. W. Hyde, Sharon, Pa.  
A. M. Leine, Honesdale, Pa. Jno. Lohmann, Jr., Edwarsville, Pa. Nicholas N. Lawery, Schenectady, N. Y. Henry Lampard, Montreal, Canada.  
H. G. Lavalle, Gouverneur, N. Y.  
C. J. McCloskey, Jeffery City, N. J. John F. Marr, Chillicothe, Ohio. F. H. Mayo, Mulhall, Pa. F. L.

Mills, Boston, Mass. Thomas W. Murphy, East Brader, Pa. John R. Murray, Centerville, Tenn. W. B. Netherly, Toronto Junction, Ont. Edward L. Page, Lancaster, Pa. J. H. Pratt, Birmingham, Ala.  
Aber V. Rand, Wolfville, N. S.  
Aber V. Smith, Clarksburg, W. Va. Clarence O. Snively, Lebanon, Pa. Moses W. Somers, Boston, Mass. W. E. Smur, Parsons, Pa. W. A. Sickle, Snow Shoe, Pa. W. Scallin, Mitchell, S. Dak.  
Howard B. Thomas, Syracuse, N. Y. J. W. Thomas, Jr., Norfolk, Va.  
W. H. Van Strander, Winsted, Conn.  
Bertie Ward, Orange, N. J. H. A. Woodward, Plainfield, N. J. Frank M. Wayne, Rochester, N. Y.

### Questions: Fifteenth and Final Series of the First Course.

#### PHARMACY.

References: Remington's Pharmacy, Oldberg's Home Study of Pharmacy, or Heebner's Pharmacy and Pharmaceutical Chemistry.

Describe the following processes as generally carried out and give instances of their practical application in pharmacy or in the allied arts.

161. Percolation and repercolation.
162. Titration.
163. Infusion.
164. Decoction.
165. Maceration.
166. Solution and supersaturated solution.
167. Circulatory displacement.
168. Filtration.
169. Clarification.
170. Decantation.

### Student's Column.

#### Organic Materia Medica of the U. S. P.

[Continued from Page 321.]

#### Balsamum Peruvianum. Balsam of Peru.

BOTANICAL NAME.....Toluifera Perelra.  
NATURAL ORDER.....Leguminosae.  
HABITAT.....Sonsonate, coast of San Salvador in Central America. Exported from Acajutla and Belise.  
CONSTITUENTS.....Benzyllic cinnamate prin. constit.—benzyllic alcohol, benzyllic benzoate, stilbene, resin.  
PROPERTIES.....Stimulant expectorant, local antiseptic, protective of tissues.  
PARTS USED.....The balsam obtained by incision from the stem.

Dose—Gm. 2 in emulsion or on sugar; used also as a dressing on ulcerous surfaces.

#### Balsamum Tolutanum. Balsam of Tolu.

BOTANICAL NAME.....Toluifera Balsamum.  
NATURAL ORDER.....Leguminosae.  
HABITAT.....Mountains of Venezuela and banks of the Magdalena in New Granada. Exported from ports of Venezuela.  
CONSTITUENTS.....Amorphous resin; cinnamic and benzoic acids; toluene ( $\text{C}_7\text{H}_8$ ).  
PROPERTIES.....Bronchial sedative.  
PARTS USED.....The balsam obtained by incision from the stem.

Dose—Syr. Cc. 4–8; Tinct. Cc. 4.

#### Belladonna Folio. Belladonna leaves; deadly night shade.

BOTANICAL NAME.....Atropa belladonna.  
NATURAL ORDER.....Solanaceae.  
HABITAT.....Woods of Central and Southern Europe; cultivated in England and United States.  
CONSTITUENTS.....Atropine, 0.44 per cent. asparagin, albumin gum, etc.  
PROPERTIES.....Anodyne, sedative and narcotic; antidote to opium and physostigma.  
PARTS USED.....The fresh and dried leaves.

Dose—Ext. alcohol. Gm. 0.016–0.03; Tinct. Cc. 0.43–0.60.

#### Belladonna Radix. Belladonna root; deadly night shade.

BOTANICAL NAME.....Atropa belladonna.  
NATURAL ORDER.....Solanaceae.  
HABITAT.....Woods of Central and Southern Europe; cultivated in England and United States; exported from Germany.  
CONSTITUENTS.....In young roots 0.06, old roots 0.25 per cent. of atropine.  
PROPERTIES.....Anodyne, sedative and narcotic, antidote to opium and physostigma.  
PARTS USED.....The soft young roots, collected after the flowering season.

Dose—Ext. Ad. Cc. 0.06–0.12.  
(To be Continued.)

## Business.

*Under this head will be conducted a department on the promotion of the business interests of the retail druggists in all their aspects, including that of advertising.*

*Our readers are invited to offer suggestions, to submit specimens of advertisements and to send inquiries on any points in which they are interested.*

*Written for the  
American Druggist and Pharmaceutical Record.*

### MONEY-WASTING ADVERTISING.

#### Some Worthless Advertising Mediums: The Fake Directory and Overcrowded Circular.

BY NATH'L C. FOWLER, JR.

The man who says that all advertising pays trifles with truth.

Half the advertising mediums are worth half charged for them.

Half the methods of publicity are worth little more than nothing.

The circulation of the average advertising solicitor is twice as large as the circulation of his medium.

Half the advertising is placed because the man who asked for it knows his business.

Half the printed matter suits the compositor better than the man who sends it out.

Half the printed matter is ten times too long.

Half the advertisements attract nobody.

Half the descriptive catalogues are understood principally by their publishers.

Advertising will pay if not too much and not too little money is expended for it.

Economy is to be practiced in advertising.

Economy is to be practiced in everything.

Too much economy in advertising is just as unprofitable as too little of it.

The newspaper or regularly issued periodical is the fundamental back, sides and bottom of all successful advertising, and all else to be profitable must be used in conjunction with it.

The circular has its place. So has the flyer, the hand-bill, the sign on the fence, the painting on the rock, the novelty, and everything else which tends to bring people to the store, or to keep regular customers.

In every town of any size there are one or two directories.

The majority of directories are issued by concerns who grind them out by the yard, and paste on new covers, getting their names from the other directories.

The directory publisher depends upon the advertisements and not upon the sale of the directory for profit, because it has no sale.

The majority of local dealers advertise in every directory.

It may pay to advertise in the regular standard directory of the town, but it never pays to advertise in directories not thoroughly standard.

If the advertiser thinks his advertisement in the back pages of the directory, surrounded by one hundred or one thousand more advertisements, is of any particular use to him, let him put a five dollar bill among these advertising pages, place the directory in the most conspicuous place in the store, and he will find that his money is almost as safe in that directory as it would be in his safe.

The charitable programme, and programmes issued by local entertainment committees, come under the classification of legitimate blackmail, that is, they are honestly issued, their publishers are leading men and women, and it generally does not pay the advertiser to refuse to place a small announcement in them, because by not so doing he is liable to get the ill will of regular or prospective customers. He must take this advertising space, although it is practically worthless in itself, and charge it either to charity or to profit and loss.

The advertiser issues a pamphlet describing his goods.

He spoils it because he plasters his name all over it.

He gives information of interest to himself and not of interest to the public.

He is too technical.

He does not present his goods so that the public can understand what he intends to tell them.



I SAY!

BY JOVE!

YOU KNOW!

THE BEST THING!

you ever heard of. See how stout

I am. Well, it's all due to

REDSECKER'S HYPOPHOSPHITES.

You ought to try a bottle. Buy it at

J. H. REDSECKER & CO.'S,  
LEBANON, PA.

They sell other  
good drugs too.

He makes a directory of his catalogue when he should make of it an interesting book of reading.

More good money has been lost in catalogue and descriptive pamphlet advertising than in almost any other method of publicity.

The catalogue is indispensable. So is the descriptive circular, but its value is practically annihilated by over-writing it, and presenting it to the public, typographically and otherwise, in a way which makes the public immediately throw it into the waste basket without even a glance of recognition.

The flyer is illegitimate in that it is a cheap way of advertising, cheap in cost, and cheap in every way.

The flyer can be made to be of benefit if it contains the briefest matter, and only makes one point at a time.

The flyer should never be used to dis-

pose of regular stock, but it can be used for the announcements of bargains, shop-worn articles, or anything else out of the usual line.

The newspaper announcement of bargains is worth much more than the flyer, but both can be used to advantage.

Never let a boy distribute flyers, unless the boy is guaranteed by some surety company.

If he is like the average boy, or like you as you were when a boy, he will leave from one to one hundred at each house, and give to each passer-by as many as he will take.

The circular left at the door seldom gets beyond the front steps because the wind blows it away.

If the bell is rung the servant girl takes the flyer into the kitchen, and there it remains.

About one out of one hundred circulars left at houses is seen by the inmates.

About one out of twenty-five handed to passersby is read by the receivers.

A circular to be delivered at the houses, to be of any value, must be handsomely printed, and sent in a sealed envelope, properly addressed.

The circular given out upon the street must contain so little matter and be in so large type that when the pedestrian drops it, and it happens to fall face up upon the sidewalk, it may do a little good as a transient advertisement.

Signs on fences have been proven to be profitable.

Do not have the signs so near the street that the occupants of carriages cannot easily read them.

A large sign at a distance is much better than a small one near by.

Do not use the expression "Go to Smith's," or "Smith's is the Cheapest."

Paint lines of life.

Say something broad, and out of the conventional rut.

"Go to Smith's" means nothing. "Smith's is the Cheapest" is a hackneyed expression, used by everybody.

Of course the sign cannot be changed often, and therefore it must be of permanent character, but that does not interfere with its being bright.

If you know how to be funny, be funny in your signs.

If you can make the passerby laugh you are liable to get him.

Don't try to be funny unless you know that you are funny.

Dry prose is bad enough, but cheap wit is an abomination.

The mile-board idea is not bad although conventional.

If you put up mile-boards be sure that your distances are correct.

Since its opening on June 4, the new branch store of the Alexander Hudnut drug corporation in *The Mail and Express* building has been the sensation of lower Broadway. Crowds surround the windows daily to gaze on the figure of a neatly dressed female who distributes fresh buttercups from a window dressed with the flowers, and laden incidentally with attractively decorated boxes of buttercup soap. Each week brings a new sensation. Seventeen-year locusts have been followed with attractions strange and wonderful until the public are really waking up to the fact that druggists are enterprising after all.

A druggist in Harlem, the home of human happiness and harmony, thus bursts into song upon a large card displayed in his show window:

ICE COLD SODA WATER.

Come in, girls, 'twill make your roses brighter,  
Come in, boys, 'twill make your noses whiter.

### Minnesota Pharmaceutical Association.

The tenth annual meeting of the Minnesota Pharmaceutical Association was held at Hotel St. Louis, Lake Minnetonka, June 12 and 13, 1894.

The first session was to have been held in the morning, but owing to an accident on the railroad the members did not arrive at their destination until afternoon.

At 2.15 they were ready for business. About seventy-five delegates were present at the opening of the meeting. They were accompanied by many ladies. President J. E. Stiles of St. Louis Park made an address detailing the work of the year and in general complimenting the body on its progress. Charles T. Heller of St. Paul, secretary and treasurer, reported a present membership of 226. Three members have died during the past year, but there has been a net increase of fifteen to the membership.

A balance of \$60.95 was reported in the treasury. The membership committee presented a list of 60 new names, the largest since the organization of the body in 1885.

Report of committee on insurance on the formation of a mutual insurance company among the druggists. The scheme was thought to be a good one and was so reported, but no action was taken, as some opposition showed itself among those present. The committee on the school of pharmacy at the university made a report at the afternoon session, and what comment they had to offer on the conduct of the school was heard with deep attention. As the school was organized at the solicitation and by the aid of the State association its course has always been closely watched by members of the organization and a committee report on it has always been had each year. That presented was very favorable to the school and expressed belief in its flourishing condition.

Second session called at 8.30 P.M. It was decided to postpone the election of officers until Wednesday at the morning session.

Daniel R. Noyes of Noyes Bros. & Cutler, St. Paul, was introduced as representing the National Wholesale Druggists' Association, as one of its ex-presidents. He spoke briefly, thanking the association for its courtesy and giving a greeting from the national association.

The ninth annual report of the State board of pharmacy was presented by Secretary H. G. Webster of Minneapolis.

The board held nine meetings during the year, four of which were the regular quarterly examinations. One hundred and eighty-nine persons applied for registration by examination and attended these meetings. Of this number thirty-four passed as pharmacists, sixty-five assistants, and ninety were rejected.

A resolution was passed approving the work of the board. A report on adulterations was read by the secretary for the chairman of the committee, L. A. Harding of Fergus Falls.

A history of the college of pharmacy of the university, which had been prepared by Dean Wulling, of that school, before his departure for Europe, was also read by the secretary.

A paper by the secretary, on elixir phosphate, iron, quinine, and strychnine, was also read.

A report was heard from the committee appointed to recommend to Gov. Nelson five names from which he might appoint a successor to W. A. Frost of St. Paul, who retires the first of this coming year

from his position as a member on the State board of pharmacy. The names recommended were, first, that of Mr. Frost, and then those of F. M. Parker of Red Wing, G. H. Goodrich of Anoka, R. H. G. Netz of Owatonna, and S. F. Boyce of Duluth.

The following were admitted as new members of the association: Moses L. Payant, Faribault; Edward J. Gerboth, Chatfield; Philip Schleiger, Grand Meadows; Charles R. Marelius, P. H. Middents, Carl P. Arzt, John A. Sorg, St. Paul; Edward C. Dorr, Austin; George S. Shimm, Buffalo; James Lonsdale, Royalton; George D. Pearce, Dexter; Hartley J. Hollister, Lakefield; W. P. Becken, Montgomery; Mary Haggerty, Wyota; Mrs. Lizzie E. Breckenridge, Pine City; James R. Springstead, Dodge Center; W. B. Hawley, Faribault; W. M. James, Breckenridge; F. L. Glozbach, Faribault; E. E. Butch, Owatonna; A. L. Hilleman, Arlington; Emma M. Combacker, Detroit; Frank O. Weygant, Ada; Nels C. Nelson, Wells; William H. Hazle, Austin; John C. Hanson, Litchfield; P. Bertram Hanson, Sauk Center; M. O. O'Dink, Wabasha; Charles W. Huhn, Minneapolis; Martin Nelson, Grand Meadow; Benoit O. Kyseth, Lanesboro; H. Hanson, St. Paul; Henry Rouch, A. F. Grotelend, E. Y. Wilson, G. A. Rose, Charles M. Kistler, H. A. Loughlin, B. L. Levy, C. E. Chilstrom, J. Frank Gould, Louis W. Koch, Ralph C. Larrabee, Andrew J. Kline, Edward Rund, Oscar Oberg, Aaron B. Hermann, H. P. Dean, C. A. Backdahl, John Gormley, J. H. Moody, E. Hesselberg, J. W. Thompson, Alph Backdahl, John Goldner, Y. Laws, C. E. Haugan, H. C. Kruckeberg, Truman Griffin, George A. Crocker, all of Minneapolis. Chas. W. Pardoe of Minneapolis and W. J. Walsh of Waverly, total of sixty-two new members, of which Mr. Jo. Peterson and Mr. Edward Shumpik of Minneapolis, secured thirty.

Third session was called to order Wednesday morning at 10 A.M.

The election of officers was the first business to come up. The association, true to its custom, placed an entirely new set of men in authority, the only exception being C. T. Heller of St. Paul who was asked for another year to watch the treasury of the association and to keep an account of its membership rolls. The officers elected were as follows: C. F. Rohde of Waterville, president; E. Shumpik of Minneapolis, first vice-president; J. O. Peterson of Minneapolis, second vice-president, and Mrs. Lizzie Breckenridge of Pine City, third vice-president. Mrs. Breckenridge is the first lady to hold office in the association, and this is the first year ladies have been admitted to membership in the association. "She is a graduated pharmacist and a successful one. There are only three lady members at present.

Of the business discussed during the day that concerning the subject of trade interests was the most important. For the protection of such interests the proposition was advanced that a line of household remedies, to be sold by druggists largely in place of patent medicines, should be manufactured by the State association. This proposition caused a general discussion and one which waxed warm at times, but no actual decision in the matter was reached, although the burden of opinion seemed to favor the adoption of the scheme as proposed. As finally left, the president was asked to appoint a committee to prepare another report such report to be presented at the next annual meeting. In connection with the subject of patent medicines further action was taken in the passage of a motion instructing the committee on legislation to prepare a bill to be sent into the next legislature requiring all peddlers of patent medicine to pay a license of \$100 per annum for such privilege.

Dean Wulling, of the College of Pharmacy at the university, has always taken an active interest in the association, and at one of yesterday's sessions an offer from him was received to deliver this year a course of lectures on subjects of interest to pharmacists, if it were wished of him. The lectures would be after the fashion of

university extension lectures, and would be delivered in the evening, so that the pharmacists and clerks of the Twin Cities could take advantage of them. Should the course of lectures be given, as it undoubtedly will, the association will have stenographic reports of them taken and then printed copies sent out to members of the association. Secretary H. G. Webster of the State board of pharmacy was made the chairman of the committee to talk with the Twin City members of the association and discover whether or not they would be willing to support such a course of extension lectures as would be given by Dean Wulling.

Dr. C. Weschcke and C. L. Roos of New Ulm placed on the honorary list. Another honorary elected was J. C. Donaldson of Detroit, Mich., the first man outside Minnesota's borders to receive such a distinction.

Fourth session was called at 2 o'clock. The new officers were properly installed in office.

The association decided to hold the next annual meeting at Lake Minnetonka, June 11 and 12, 1895.

The Twin City jobbers having done much to make a success of the meeting, before adjournment, a vote of thanks to them was unanimously passed. The retiring officers were also remembered in this manner and the sense of obligation to them on the part of the association expressed by an unanimous vote.

On the conclusion of their session the members took their way to the tennis courts where a programme of games was carried out under the successful direction of Frank Hainert of Minneapolis, as master of ceremonies. Never before have the members of the Minnesota Association made sports a part of their regular programme, but after this experience it is safe to say they will never omit it in the future.

### The Ohio Association.

The sixteenth annual convention of this association was opened in the Grand Hotel, Cincinnati, on June 5. Mayor Caldwell welcomed the visitors and H. D. Eady of Elyria, replied. The morning session was taken up with the presentation of the reports of officers.

At the afternoon session 82 new members were elected. The Abbott bill came in for vigorous condemnation. G. W. Dietrich, of Carthage, Mo., and Charles Merkenmeller, of Wheeling, W. Va., were elected honorary members.

The association then proceeded to the election of officers for the ensuing year, which resulted as follows: President, C. T. P. Fennel of Cincinnati; first vice-president, J. T. Piffner of Delaware; second vice-president, George Voss of Cleveland; permanent treasurer, J. H. Von Stein of Upper Sandusky; permanent secretary, Lewis Hopp of Cleveland; executive committee, John Byrn of Columbus; John Ruppert of Cincinnati, and S. Aubly of Cleveland.

Reports of the various officers and committees were submitted, and took the usual course.

At the second day's session the president's recommendation to increase the dues to \$2, and to raise the salary of the secretary from \$100 to \$200 were favorably acted upon.

The Dow tax law, which druggists at large condemn as unjust to their trade, also came up for argument. The majority favored the restriction of the sale of liquor only upon the written prescription of a reputable physician for medicinal



purposes only. At the close of the session no definite conclusion was reached as to the stand the association would take upon this point, and the matter will come up again before the close of the convention.

For the second time the question of creating a fund to fight any iniquitous measure that may be sprung in Columbus and which would be detrimental to druggists in general, was revived. Many were of the opinion still that this would be absolutely necessary, and plain language was used in setting forth how such a fund would be found necessary to serve the end in view. President-elect C. P. T. Fennel, however, in a forcible speech, convinced his fellow members that when such a fund would be found necessary, the druggists of Ohio would come manfully to the front and contribute their quota to fight such measures with legal weapons and by moral suasion.

At the final session on June 7, Sandusky was selected as the place, and the second week of June, 1895, as the time of the next meeting.

### Utah Pharmaceutical Association.

The Utah Pharmaceutical Association opened its third annual session at the court house in the city of Provo on Tuesday, June 5, amid palms, potted flowers and roses.

At 10:30 President Ash called the session to order and Rev. Andrews offered an opening prayer.

R. S. Hines read a brief address of welcome to the association, and introduced Mayor Holbrook, who also welcomed the visitors to the Garden City.

He spoke of the great natural advantages of the city and welcomed the association. Provo was proud that the association had chosen this city as the place for its third annual meeting.

A tribute was paid to the druggists of the city for their reliability, and the mayor thought such associations as this were beneficial, as they tended to do away with quacks.

G. H. Fennemore, of Beaver, responded to the speeches of welcome. He claimed to be a much better worker than a talker. It is always pleasant to be in touch with brothers of the same craft, where ill malice can be thrown aside and the hand of friendship is held out.

He paid a pretty tribute to Provo. "I have stood at the foot of the Himalayas and on the grassy banks of the Monongahela," he said. "I have traveled over France and Italy, but I have never been in a place where there were so many natural beauties as here."

The roll was next called, showing the following attendance:

President Ash, Ogden; Clarence H. McCoy, W. A. Neiden, F. J. Hill, J. B. Farlow, L. U. King, Salt Lake; R. S. Hines, H. S. Pyne, Alex. Hedquist, Provo; J. L. Boyden, Coalville; E. B. Sorley, Spanish Fork; J. B. Roberts, J. B. Farlow, Salt Lake; H. A. Walker, T. H. Carr, Ogden; T. J. Wardworth, Lehi; G. H. Fennemore, Beaver; John Quigley, Payson; Dr. Pike (honorary member), Provo.

The following applicants for membership were received and favorably acted upon: W. C. Britt, Vernal; B. B. Schreder, Salt Lake; A. D. Thorburn, Byron Ott, Ogden, and D. E. Ellingsen, Lehi.

H. S. Pyne was called to the chair, and President Ash read his annual address. It congratulated the association on its progress, and referred to the great field for pharmacists in Utah. The report was adopted.

The address was adopted and ordered spread upon the minutes.

Secretary McCoy read his annual address, showing a deficiency of \$128, and a great many dues unpaid.

The report was referred to a committee for auditing.

T. H. Carr, chairman of the executive committee, reported on the amount of printing done.

The report was accepted.

The chairman of the committee on trade interests sent in his report, which the secretary read. It mentioned a number of complaints in the profession.

The report was adopted.

The report of the chairman of the committee on pharmacy records was also read by the secretary. It gave suggestions as to needed legislation and was laid upon the table for further consideration.

The committee on legislation reported progress.

The afternoon session was devoted to the election of officers.

F. J. Hill of Salt Lake was elected president for the ensuing year by acclamation and made a short address.

R. S. Hines of Provo was elected first vice-president, and F. B. Hurlburt of Ogden second vice-president.

For secretary L. U. King and T. H. McCoy, both of Salt Lake, were nominated.

The vote stood, King 12 and McCoy 6. Mr. King was declared elected and made a brief speech, thanking the association for the honor conferred.

R. S. Hines, first vice-president, having arrived, made a brief address in response to a call by the association.

For treasurer John Quigley of Payson was elected.

For executive board the following members were elected: Alex. Hedquist, Jr., Provo; Geo. H. Fennemore, Beaver; H. G. Bates, Park City, and T. H. Carr, Ogden.

### The Arkansas Association.

The twelfth annual meeting of the Arkansas Association of Pharmacists was held in the Arlington Hotel, Hot Springs, Arkansas, June 5th, 6th and 7th.

The attendance was very good. The business sessions were held during the day. The address of the president, G. N. Hart, was attentively listened to.

The reports of the several committees showed a very encouraging state, both commercially as well as pharmaceutically. Each evening was devoted to social enjoyments, which had been carefully prepared by the local druggists of Hot Springs, who entertained in a royal manner. The next meeting will be held in Pine Bluff, time to be selected by the executive committee.

A resolution was adopted inviting the American Pharmaceutical Association to meet in Hot Springs, Ark., in 1895.

The officers elected were as follows:

President, J. M. Anderson, Pine Bluff; first vice-president, J. M. Sparks, Fort Smith; second vice-president, W. L. Carr, Hot Springs; secretary, J. F. Dowdy, Jr., Little Rock; treasurer, J. A. Jungkind, Little Rock.

### Missouri Pharmaceutical Association.

The sixteenth annual meeting of this organization was held at Excelsior Springs June 12, 13, 14 and 15. The attendance exceeded that of any previous year, there being present about twenty per cent. of the total membership of the association. The convention was opened Tuesday morning by President Wm. Mittelbach of Boonville. After prayer by the Reverend Mr. Barbee,

the members of the association were welcomed to the Elms Hotel by its manager Col. Morse, who presented the association with a six foot key as a token of sincerity of invitation. Prof. Francis Hemm of St. Louis responded to Col. Morse's address in his usual happy manner.

Mr. A. S. Forker, chairman of the Committee on Membership, reported seventy-six new names, all of whom were duly elected. Two subsequent applicants were rejected on account of having been dropped for non-payment of dues a few years ago.

The annual address by President Mittelbach was an able document dealing with local, state and national pharmaceutical affairs as related to the Missouri State Pharmaceutical Association. The document was referred to a committee consisting of Prof. Hemm of St. Louis, Mr. E. Soper of St. Joseph, and Dr. R. R. Edmonds of Miami, who reported at a subsequent meeting favoring the recommendations of the president and all of them were adopted.

Dr. H. M. Whelpley, secretary, submitted his report containing a number of recommendations, all of which were concurred in by the association. One of these was for the admission of legitimate advertisements in the next volume of proceedings.

The sincere greetings of the association were wired the State Pharmaceutical Association of Minnesota, Indiana and Pennsylvania, all three of them being in session at the same date. Pleasant responses were received from these organizations.

The treasurer, Ed. G. Orea, reported all bills paid and a balance of eleven dollars and five cents on hand.

Dr. J. C. Falk, chairman of the Committee on Papers and Queries, reported the following contributions, all of which were read and thoroughly discussed during the meeting, viz.:

"Doses for Pharmacists," by Dr. H. M. Whelpley, St. Louis.

"Potassium Iodide and Bromide of the Market, do they come up to the Requirements of the Pharmacopoeia?" by G. H. Chas. Klie, St. Louis.

"The Practical Value of a Drug Journal," by A. N. Doerschuk of Kansas City.

"Aromatic Syrup of Licorice," by H. F. Hasselbrock, St. Louis.

"Report of Research Committee B, of the U. S. P. Committee," by Dr. Chas. O. Curtman, St. Louis.

"Fifty Observations for Pharmacists," by Dr. H. M. Whelpley, St. Louis.

"The Practical Value of a Drug Journal," by Ambrose Mueller, St. Louis.

"Some Incompatible, Explosive and Questionable Prescriptions," by Prof. James Good of St. Louis.

"Report of the Committee on U. S. Pharmacopoeia," by Dr. Chas. O. Curtman, St. Louis.

"A Report on Cantharadis," by A. Brandenberger, Jefferson City.

"A Report on Volatile Oils," by Dr. C. C. Hamilton, Kansas City.

"What is a Poison," by A. N. Doerschuk, Ph.G., Kansas City.

"A Few Paragraphs on Pharmacy, from an Introduction of Liebig's Chemistry Published in Heidelberg, Germany, 1848," by Ambrose Mueller, Ph.G., St. Louis.

"A Medicinal Dynamometer," by Dr. H. M. Whelpley, St. Louis.

Albert N. Doerschuk of Kansas City was awarded the prize of a copy of the United States Dispensatory offered by the Meyer Brothers, *Druggist* for the best paper on "The Practical Value of a Drug Journal." A committee appointed for the purpose



will report on the other prizes offered for papers.

A. Brandenberger, chairman of the Committee on Legislation, submitted an exhaustive report outlining an ideal pharmacy law for Missouri. The new committee on legislation will act in accordance with the suggestions contained in this report.

The association passed a resolution expressing the sense of the organization in favor of the introduction of doses in the Pharmacopoeia of 1900.

The following were elected associate members of the association: Chas. W. Bitman, St. Louis; J. C. Fisher, Chicago; Mrs. M. O. Miner, Hiawatha, Kan.; H. S. Susman, Kansas City; H. R. Strong, St. Louis.

Chas. Geiger, delegate from the St. Louis Drug Clerks' Society, addressed the association tendering the fraternal greetings of that organization.

Among the delegates present from other organizations were: Mrs. M. O. Miner, secretary of the Kansas State Pharmaceutical Association; F. A. Faxon of Kansas City, president of the National Wholesale Druggists' Association; Prof. L. E. Sayer of the Kansas School of Pharmacy; Mr. O'Riley, Kansas City, Kan.; Dr. R. J. Brown of Leavenworth, Kan., and F. T. Warner of Kansas.

Dr. P. H. Franklin of Marshall, chairman of the Committee on Necrology, reported the death of but one member, Mr. John S. Moffitt. On motion a special committee was appointed to draft appropriate resolutions. These were submitted by Dr. F. L. James and ordered engrossed for presentation to the family of the deceased.

G. J. Meyer of St. Louis, chairman of the Committee on Trade Interest, submitted a careful report reviewing the condition of trade for the past year.

Communications were read from Gov. Stone, R. H. Swenny, Ash Grove; J. L. Baker, Kimmund, Ill.; M. A. Bisele, Hot Springs, Ark., and others, all presenting their regret for forced absence from the meeting.

Mayor Davis of Kansas City was introduced and presented a strong patriarchic address tinged with pharmaceutical affairs, which was received with enthusiasm, and responded to by Prof. James Good of St. Louis.

The Committee on Time and Place of Meeting reported in favor of Excelsior Springs the second Tuesday in June, 1895. The recommendation was unanimously adopted.

The election of officers resulted as follows: President, A. Brandenberger, Jefferson City; 1st Vice-President, H. C. Grove, Glasgow; 2d Vice-President, J. F. Boaz, Springfield; 3d Vice-President, Mrs. McVey, Kansas City; Treasurer, Ed. G. Orear, Breckenridge; Secretary, Dr. H. M. Whelpley, St. Louis; Assistant Secretary, Ambrose Mueller, St. Louis, and Local Secretary, W. H. Newlee, Excelsior Springs.

Council: Wm. Mittelbach, chairman, Boonville; J. M. Love, Kansas City; R. E. Maupins, Pattensburg; Otto Claus, St. Louis; S. A. Howard, Kansas City.

Special prizes were awarded as follows: To the oldest member present a copy of Curtman's Lecture Notes by Whelpley, awarded by the author to Mr. H. F. A. Spilker of St. Louis.

For the best exhibit of U. S. P. ointments made by a retail druggist, an herb-arium of pressed medicinal plants, presented by Eli Lilly & Co. to J. F. Boaz, Springfield. Second prize, a copy of the German Pharmacopoeia, presented by

Prof. Francis Hemm to Mr. A. Brandenberger of Jefferson City.

For the best exhibit of U. S. P. syrups made by a retail druggist, a copy of the U. S. Pharmacopoeia, presented by President Mittelbach to Mr. Rudolph Vitt, St. Louis. Second prize, a Universal hydro-meter, presented by Prof. James Good to Henry Garthoffner of Boonville.

To the youngest member present, a copy of Whelpley's Therapeutic Terms, presented by the author to Mrs. McVey of Kansas City.

After the installation of officers, President Brandenberger announced the chairmen for the different committees for the incoming year as follows:

Papers and Queries, G. H. Chas. Klie, St. Louis.

Drug Adulteration, Prof. Francis Hemm, St. Louis.

Pharmacopoeia, Dr. Chas. O. Curtman, St. Louis.

National Formulary, Wm. Mittelbach, Boonville.

Microscopy, Dr. H. M. Whelpley, St. Louis.

Legislation, H. F. A. Spilker, St. Louis.

Trade Interest, Hon. W. P. Walbridge, St. Louis.

Entertainment, G. E. Hopkins, St. Louis.

Exhibits, John Curry, Moberly.

Deceased Members, Dr. E. L. James, St. Louis.

Transportation, Otto Calus, St. Louis.

Membership, A. S. Forker, Sedalia, Mo.

Attendance, W. P. Huckle, Kansas City.

Constitution and By Laws, Wm. Mittelbach, Boonville; Prof. Francis Hemm, St. Louis; Dr. H. M. Whelpley, St. Louis.

The association adjourned, all present feeling gratified with the pharmaceutical work accomplished, the social feature enjoyed and the attendance recorded.

### Pennsylvania Pharmaceutical Association.

The annual meeting of this association was held at Reading on June 15. Elections to membership were made as follows: Jacob G. Leber, York; Irvin Hardy, Dunbar; Harvey I. Bouse, Tyrone; W. P. Browell, Steelton; P. Henry Meck, Meadeville; Frank J. Brown, Norristown; Frederick Frankie, Erie; James C. Sanderson, Reading; Attwood Yeakle and Wm. H. Campbell of Norristown, and Charles H. Blanch of Lebanon.

A letter from Dr. Benj. Lee, president of the State Board of Health, was read, in which he advised the association to assist in having another bill passed by the Legislature in reference to the adulteration of foods and drugs.

The following officers, to serve during the ensuing year, were elected unanimously, having been recommended by the committee on nominations: President, W. H. Reed, Norristown; 1st vice-president, John B. Raser, Reading; 2d vice-president, C. W. Boyd, Butler; executive committee, A. R. Durham, Reading; Wm. S. Seabold, Annville, and J. H. Knause, Harrisburg; treasurer, Joseph L. Lemberger, Lebanon, and secretary, J. A. Miller, Harrisburg.

A handsome compliment was paid Messrs. Lemberger and Miller as treasurer and secretary by their unanimous reelection. Both have served 16 years in a very acceptable manner.

Mr. Reed, the new president, is a former vice-president, and a wealthy and successful druggist.

Prof. Trimble read a paper on "Liquor ferri chloridi," and Dr. H. N. Cox on "Mercurial Ointment." Both were ordered to be printed. Charles Dohme of Baltimore made a short address, and congratulated the association on its showing.

Wm. B. Thompson read an interesting paper on "The Drug Business of To-day and Yesterday," and J. H. Redsecker had for his subject "The Cutter and the Remedy," which was discussed by M. N. Kline, J. B. Doble, G. W. Kennedy, Thos. F. Main, Wm. B. Thompson, C. B. Lowe and others.

The latter denounced the "cutter," and said that the correct way was to secure legislation that would weed out fake preparations, etc.

C. E. Hires of Philadelphia spoke on "Shall we Give Our Clerks and Employees a Percentage of Gross Receipts Instead of Regular Salary?" He favored this plan of co-operation, and said that it had been found to pay by a number of druggists, and he urged others to try it. If this were done many young men would remain with their employers instead of going into business on the next square, and thus dividing up the trade still more. This was discussed at some length.

Dr. Reed spoke on cutting prices in patent medicines, which he urged druggists to discountenance as much as possible, as it was not a good business principle, and was injuring the trade. T. Emanuel explained the relation of the jobber to the retailers.

On motion of J. H. Redsecker it was decided to hold next year's convention Tuesday, June 18, at Eagle's Mere. Jesse B. Doble of Williamsport was elected as the local secretary.

### Boards and Associations.

**NEW YORK PHARMACEUTICAL ASSOCIATION.**—Saratoga Springs has been in possession of the pharmacists of the State since Monday evening of this week. The first session of the convention did not open until 10.30 A. M. Tuesday, but members commenced to arrive early on Monday and the attendance was gratifyingly large. Among the early arrivals from New York city were: Alfred Hy. Mason, Ed. Flueher, Thos. J. Keenan, Geo. L. Cook, Geo. Kempton, F. H. Hubbard, J. A. Farley and J. C. Barnes. The members of the State Board of Pharmacy put in an early appearance, E. S. Dawson, Jr., Secretary, A. B. Husted, B. W. Smith, C. H. Haskin being among the number. Willis Gregory and C. O. Rano of Buffalo registered later.

**LOUISIANA BOARD OF PHARMACY.**—Dr. John Gazzo, president of the Louisiana State Pharmaceutical Association with Messrs. Charles Graner and Brooks, visited Baton Rouge recently in the interest of the Loret amendment to the pharmacy bill. The present law makes the Examining Board consist of nine—four from the country and five from the city. The amendment proposed in the interest of quick examinations provides two from the country and three from the city, and the regulations touching examinations are made more stringent than formerly. Under the amendment the applicant can secure diplomas on exhibition of certificates from high class foreign institutions.

**UNIVERSITY OF KANSAS, SCHOOL OF PHARMACY.**—The afternoon of Monday, June 4, was devoted to the ninth annual commencement of the school of pharmacy of the Kansas State University. The exer-

cises were a fitting close to an excellent year's work. Year by year the class graduating increases in size and the standard of scholarship is raised. This year the degree of graduate in pharmacy was conferred upon seventeen young men and women.

The exercises were held in University Hall. The programme was an unusually interesting and attractive one. It consisted of an address by Dr. Chas. E. Bessey of the University of Nebraska, on the "Evolution of Plant Life," an oration by Perry Bigelow Barber, a member of the graduating class on "Pharmacy—From Superstition to Science," and an essay on "Pharmacy—What Is It," by Thomas Henry Kelly, also of the graduating class.

The graduating class was the largest ever sent from the school. The next class will be still larger. Each year brings out more clearly the demand for better accommodations in class room and laboratory facilities. A new building for the exclusive use of the school of pharmacy is needed and the necessity of its erection will be urged upon the next legislature.

Following is a list of the graduates:

Perry B. Barber, William M. Clar, George E. Haller, Herbert E. Jenkins, Charles E. Joslin, Thomas H. Kelly, Marlin S. McCreight, James E. Northrup, Fred. C. Oehler, Orin H. Paeker, Herbert J. Rankin, Carl D. Reynolds, Earl I. Steinberger, William O. Strother, Lewis C. G. Voeltzel, Ellsworth F. Wallick.

**NORTHWESTERN UNIVERSITY COLLEGE.** The commencement exercises of Northwestern University took place Thursday evening, June 14, at the Chicago Auditorium. There were 814 graduates, of whom sixty-five were graduates in pharmacy.

Bishop Charles B. Galloway, LL.D., of Mississippi, delivered the commencement oration.

The honor men of the School of Pharmacy were as follows:

#### GRADUATING CLASS.

Thomas Cupit, Jr., Park City, Utah; Fred. P. Krough, Salinas City, Cal.; Mal Hall Webb, Bryan, Tex.; John Weireter, Plymouth, Ind.; Frank P. Weisenburger, Defiance, O.

The Gilpin-Langdon & Co. prize was awarded to Mr. Fred. P. Krough.

#### UNDERGRADUATES.

William T. T. Davies, Sibley, Ia.; Charles A. Erickson, Salina, Kan.; James W. Germer, Chicago.

The junior prize, a gold badge, was awarded to William T. T. Davies.

The graduates were:

#### GRADUATES IN PHARMACY.

Herbert H. Bateman, James J. Bilsborrow, Ernst Z. Bower, Carl Breuning, George S. Bronson, E. Percy Brown, Edward D. Carmichael, Wesley E. Cole, Walter H. Dayton, Roscoe N. Dean, William F. Dexheimer, Leon T. Dubridge, Frank W. Dudley, John C. Dysart, Walter L. Flinn, Keene R. Fortson, Edmund C. Friatt, Judson W. Gates, Frank W. Gregory, William R. Hancock, Arthur S. Hipke, Edward E. Horrall, Edward J. Hughes, Henry J. Kamp, Louis W. Karl, Albert F. Kasper, John E. Kraft, Fred P. Krough, Edward E. Laws, Charles J. Lee, Earl R. Lovett, Harvey E. Manning, Charles P. McCaffery, Llewellyn E. McIntosh, Lorrin A. McKnight, Charles V. Miller, George W. Moschel, Hans B. Museum, John D. Nickson, Otto F. Nischammer, Ivan B. Nordhem, James W. Pryor, Walter M. Robb, William H. Rockefeller, Louis Rettig, William J. Rush, Frank E. Sahland, J. McDonald Scott, William H. Selig, William Sevier, James A. Smith, Ralph H. Smith, A. L. Thompson, James E. Torrens, Edward Tschannen, Nortal C. Unseth, James F. Watts, Mal H. Webb, John Weireter, Frank P. Weisenburger, Frank H. Weis, Theodore Wild, Jr., Albert W. Williams, Norris E. Williams, and Frank B. Wynkoop.

**CONNECTICUT COMMISSION OF PHARMACY** met at the capital on June 5 and examined eleven candidates. The board organized by electing officers as follows: President, Dr. John H. Grannis of Saybrook; secretary, Henry M. Bishop of

New Haven; treasurer, Emerson A. Hough of Collinsville; Philo A. Newton of Hartford was tendered the position on the board made vacant by the resignation of Chas. A. Rapelye, but declined the appointment. Mr. Hough accepted the appointment, but has since resigned, as he finds it conflicts with his holding the office of postmaster, which he does.

**THE NEBRASKA BOARD OF PHARMACY** held a meeting for the examination of candidates in the Hastings court room on June 6. Following are the successful candidates: R. S. Alford, Greta; O. U. Applequist, Paxton; Ed. T. Brown, Red Cloud; John Blood, Jr., Bertrand; C. E. De Witt, Stanton; J. E. Grebe, Jansen; H. H. Harley, Lincoln; Otis F. Hartquist, Lincoln; A. Kyner, Eustis; F. M. Mueller, Omaha; M. I. McCarty, Wood River; Geo. M. Prentice, Fairfield; M. H. Taylor, Stella; S. H. Williams, Beaver Crossing; John A. Zerman, Scribner.

**ARKANSAS PHARMACY BOARD MEETING.**—At the meeting held at Hot Springs on June 8, all the members of the Board were present except F. G. Kerr, of Van Buren. Five applicants for registration by examination presented themselves, of which two, Jessie V. Owens of Jenny Lind, and J. G. Bowers of Camden, were successful. Certificates were also issued to the following graduates of recognized schools of Pharmacy upon their diplomas, viz: Fitz. J. Mobbs, Hot Springs, and Samuel V. Bracy, Hope, Saint Louis College of Pharmacy; Abner Webb, Pine Bluff, Philadelphia College of Pharmacy, and Henry Weimar, Hot Springs, University of Michigan. Will L. Carr, whose term of office as a member of the Board expired with this meeting, having been re-appointed, presented his credentials and took his seat. F. G. Kerr was elected president for the ensuing year and W. W. Kerr, secretary. It was determined to offer a prize of a copy of the U. S. P., 1890 revision, leather bound, to the licentiate who should obtain the highest rating at any examination held between the annual meetings of the Arkansas Association of Pharmacists for 1894 and 1895, the award to be made at the last named meeting, provided said licentiate shall be a member of said Association, and whose dues shall have been paid in full up to date of award.

The next meeting of the Board will be held in Little Rock on the 12th day of September, 1894.

#### New York.

Robert F. Amend of Eimer & Amend sailed for Europe recently, to remain abroad for the major portion of the summer.

Among the visitors in the drug market last week were Mr. Redington, of Redington & Co., San Francisco, Cal., and H. B. Gilpin, of Gilpin, Langdon & Co., Baltimore, Md.

H. A. Cassebeer, 72d street and Columbus avenue, has rented the adjoining store and is fitting it up with entire new fixtures. These are being made by F. A. Greenough.

Louis K. Waldron, of 189 Randolph street, Chicago, is in town and is making preparations to establish a New York branch of his Chicago store, near Fourteenth street and Broadway.

Among the graduates of the College of Physicians and Surgeons at the last session was Arthur Braunlich, Ph.G., N. Y. C. P., who was for some time apothecary at the dispensary on Centre street.

Fred. L. Carter of Carter, Carter & Kilham, Boston, Mass. Mr. Phillips of I. L. Lewis & Co., New Orleans, La., were among the visitors to the New York drug market during the past week.

Prof Fluckiger who is at present a guest of Dr. Squibb at his country home is unfortunately not in robust health and is therefore compelled for the present to avoid any unnecessary fatigue or excitement.

James B. Kilsheimer, assignee of Daniel F. O'Connell, the well known Broadway druggist, who made an assignment on June 1, states that Mr. O'Connell has settled with creditors in full and resumed business in his own name.

The physician who attended Vanderbilt on his yacht during a four months' trip was paid a fee of \$60,000. We also hear that Dr. Galezowski of Paris will receive \$25,000 for his visit to Persia in order to attend the eldest son of the Shah.

The Alumni Association of the New York College of Pharmacy enjoyed their annual outing at Peleter's Grounds, New Dorp, Staten Island, yesterday (Wednesday) afternoon. There was the usual bowling, baseball, dancing, etc., and the affair was a brilliant success from a social standpoint.

The Physicians' Pharmaceutical Company of New York City is the name of a company recently incorporated at Albany to carry on a wholesale and retail drug business; capital, \$20,000, and directors, Max Wolper, Michael Lewinski, Leo Sandberg, Samuel D. Dlugach and Alex. I. Aronson, New York City.

Charles Gundlich, *cand. chem.*, is the way the card of a graduate of the N. Y. C. P. of '93 reads, who has since been studying at Heidelberg. Mr. Gundlich is taking a course in Chemistry as his card indicates, for the doctorate. He is visiting New York during the Summer vacation but will return to complete his course.

Dr. Humphrey, of the Humphrey Medical Co., has given to the Church of the Heavenly Rest a 10-acre plot of land and a fine residence at the Copake Iron Works, Columbia Co., N. Y., value \$5,000. This will be used as a summer home for the poor children of the above parish and will be known as the Helen Francis Rest, in memory of the late daughter of Dr. Humphrey.

Among the passengers booked for Cook's fall tour to Europe, Egypt and the Holy Land are Mr. and Mrs. Henry D. Annable, of 375 Tompkins avenue, Brooklyn. The route proposed is a most delightful one, and as they will be abroad over one hundred days they will have an opportunity to see a good deal of that country. Mr. and Mrs. Annable are extensive travellers, having visited California, Alaska and Yellowstone Park last summer.

J. R. Crawford, pharmacist, of 28 Spence Place, Brooklyn, claims that he was assaulted in front of his home on June 6 by four men whom he met leaving his house. The men, he says, obtained entrance into the house on the plea that they had a subpoena from Lawyer S. S. Terry of 10 Wall street, New York, which they had to serve personally upon Mrs. Crawford. Mrs. Crawford refused to accept the service, and the men became abusive. Miss Crawford ran to the drug store and notified her father, who hastened to the house, where he met the men. He claims he was knocked down and kicked by them. He believes the men went to his house and made trouble in order to get him from his store, that they might rob it.

At the last regular meeting of the New York College of Pharmacy for the season, last week, an innovation was instituted in having the meeting in the afternoon. This being the first meeting in the new building the occasion was marked by an informal luncheon served in the pharmacognasy room. Brief addresses were made by President Fairchild, Dr. Rice, Prof. Rusby and Messrs. Main, Ramperger, Louis, Tscheppe, Holzhauser, Massey, Hoffman and others.

L. Keyser, who succeeded Rushton at Twenty-sixth street and Sixth avenue, has a remarkable double in the stationery store at Twenty-seventh street and Broadway. Both are short, stout, have full brown beards streaked with gray, and wear spectacles. For a long time the mistakes that were made in regard to their identity were genuine. But since people in that vicinity have become thoroughly familiar with their strong resemblance, they take great pleasure in sending strangers to the stationery man, whenever he appears on Broadway, to compliment him on that last prescription he made up. Mr. Keyser is treated in a similar way in regard to orders for new books. The fun of it all is that both still continue to believe that these mistakes are made honestly.

A marked degree of suppressed excitement was noticeable in the downtown drug district on last Saturday. There were hurried consultations, emphatic assertions and equally emphatic denials. The assertions were from outsiders and were to the effect that George J. Seabury had been seen buying a straw hat. This was strenuously denied by his friends until Mr. Seabury actually appearing with the hat on his head, it was no longer possible to conceal the truth. A noticeable air of depression was observed to follow the confirmation of the rumor, but this was followed later by much relief when the bulletin was sent out that Mr. Seabury had decided to "shoot the hat."

A. Hy. Mason of Seabury & Johnson and Thomas J. Keenan of THE AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD are in attendance on the State meeting at Saratoga.

In pursuance of a call issued by R. W. Phair, a number of gentlemen connected with the wholesale drug and chemical trades met in the parlors of the Astor House on Saturday afternoon with a view to establishing a downtown dining club for the members of the wholesale drug and chemical trades and allied callings. W. W. Dixon was elected temporary chairman and R. W. Phair temporary secretary. Various suggestions were made and much enthusiasm shown for the objects of the proposed organization by those present. As the projectors of the club had not formulated any definite plan a committee was appointed to formulate such a plan, investigate the conditions, interview the trade, and report to the temporary chairman, who is then to call another meeting to go into permanent organization. Among those present were Geo. Wasson, H. C. Peters, F. W. Koch, Lehn & Fink; W. G. Tompkins and Chas. Weiss, McKesson & Robbins; E. T. Sawtelle, The Arlington Chemical Co.; E. S. Sayre, Seabury & Johnson; W. W. Dixon, J. L. Hopkins, J. L. Hopkins & Co.; Phil. H. Tilden, Fred Kalbfleisch & Co.; Ed. Yound, Thurston & Braidisch; C. B. Franke and R. W. Phair, and R. W. Phair & Co.; H. T. Jarrett, Mallinkrodt Chemical Co.; W. G. Ungerer, Colgate & Co.; John Queeney, Merck & Co.; R. E. Stoechel; Caswell A. Mayo, AMERICAN DRUGGIST AND PHARMACEUTICAL RECORD,

Dr. Chas. E. Serre, and C. A. Fulton. Among those who have signified their approval of the proposed club, but who were not present, are Herbert Turrel, Parke, Davis & Co.; David E. Green, Jr., and A. Hamilton. David E. Green; W. P. Ungerer, B. Wakefield, Stallman & Fulton; J. Bowne, Hall & Ruckel; John Oshler, McKesson & Robbins; Geo. Allen, Henry Allen; H. H. Schuyler, Johnson & Johnson, R. H. Cabell, Armour & Co., H. Brocking; C. G. Euler, Dodge & Olcott; and S. H. Comstock. The committee on permanent organization is composed of Messrs. Tilden, Koch, Wasson, Sayre, and Young.

### Boston.

The new act which has been adopted relating to the granting of licenses to druggists, will, in the near future, be of much interest to pharmacists in this State. Its adoption at the present time renders it too late to have any effect upon the license question this year, as most of the permits for the sale of the ardent have already been granted. But when the time for granting licenses arrives again, then the druggist will from necessity consider its provisions. This law marks a new era in the subject of granting licenses, as it places control of the matter in the hands of a board of pharmacy. The outcome of this provision will be looked forward to by other States with much interest. It seems perfectly proper, however, and a step in advance of past legislation, to place the control of this question in the hands of a body composed wholly of men connected with the business affected thereby. It undoubtedly clothes the board with a great deal of authority, but that is necessary to render the act efficient. It seems, too, that it will have a wholesome effect in weeding out many of the apologies for drug stores, places where a pretension of conducting a drug business is made simply as a cloak for liquor selling. Some complications may arise, however, over the meaning of the latter part of the first section. It is a question with whom complaints against applicants are to be lodged; is it to be the board of pharmacy, or the board of selectmen of a town, or the licensing board of a city? Inferentially, complaints are to be sent to the pharmacy board, but the act in this respect is not as clear as it might have been. Then again, presuming that a complaint has been made—the proper board for receiving such having been determined—and an investigation, which is not legally provided for in this act, proves the charges unfounded, is any person or any board authorized to dismiss such complaint and say that the applicant "is a proper person," etc. The law says that all registered persons are to be considered proper "when no complaints have been made against the applicant for such certificate," which confronts us with this question, a complaint having been made, does not that settle the applicant's right to a certificate? Chapter 472 of the acts of 1893 provides for investigations of violations of pharmacy and liquor laws, by the board of pharmacy, but does the authority vested in the commission by this act provide for investigation and a subsequent decision in a law enacted this year?

Already the police commission of Boston has decided that any person, running two or more stores, will receive a license for one store only. The basis for this action is that a registration certificate is essential for the procuring of a license, and as no duplicate certificates can be granted, it

has been held that a store in which a certificate is not displayed, cannot be licensed. This interpretation is in accordance with the views held by Chairman Whitney of the pharmacy board, but is made too late in the season to have any effect upon the license question this year.

This new law is known as Chap. 435, and is as follows:

SECTION 1. No license of the sixth class described in section ten of chapter one hundred of the Public Statutes shall hereafter be granted to any person who is not a registered pharmacist, actively engaged in business on his own account; nor to any such registered pharmacist unless he shall present a certificate from the state board of registration in pharmacy stating that, in the judgment of said board, he is a proper person to be intrusted with such license, and that the public good will be enhanced by the granting of said license; provided, however, that any registered pharmacist may be considered a proper person to receive such a certificate when no complaints have been made against the applicant for such certificate; and when complaints are made they shall be in writing, specifying the reason, if any, why a certificate should be withheld.

SEC. 2. For each certificate so granted by the board of registration in pharmacy said board shall be entitled to receive a fee not exceeding one dollar, to be paid by the applicant. Such certificate shall not be valid after one year from the date thereof.

SEC. 3. Chapter two hundred and seventy of the acts of eighteen hundred and eighty-nine, and also all acts and parts of acts inconsistent herewith, are hereby repealed.

SEC. 4. This act shall take effect upon its passage.

The appended self-explanatory blanks were devised by President Whitney; they have been adopted by the board and are to be used in connection with the enforcement of this act:

(No. 1.)

### APPLICATION FOR CERTIFICATE.

AS REQUIRED BY CHAPTER 435, ACTS OF 1894.

I, ..... of the firm of ..... of the city—town of ..... being now actively engaged in the compounding and dispensing of drugs, medicines, chemicals or poisons at No. .... Street—Avenue, in said city—town of ..... as authorized by my certificate of registration, form No. .... and No. .... do hereby apply for certificate, as required by above-named act, having made, or intending to make upon receipt of certificate, application to the proper authority for such license, as provided in said act, and for said location. I am of lawful age and have at least five hundred dollars invested in said business in said locality, and hold myself responsible for said amount. I also claim to be a proper person, and that the public good will be promoted, as expressed in section 1 of said act.

Dated at ..... [Sign here.] .....

N. B.—This blank must be carefully filled out, duly signed, dated, and the indorsement upon the back signed by the treasurer or assistant treasurer of the city or town where the applicant is doing business. Any statement found to be untrue, or attempt at evasion, may be deemed sufficient cause for refusing any subsequent certificate. All applications must have inclosed a printed card or label, to avoid error in name or location.

(No. 2.)

COMMONWEALTH OF MASSACHUSETTS.  
OFFICE OF THE BOARD OF REGISTRATION IN PHARMACY,  
Rooms 20 and 21, State House Annex.

THIS IS TO CERTIFY that this Board, having on file the application and such evidence as is required in section 1, chapter 435, Acts of 1894, issues this certificate for the purposes named in said act to ..... of the firm of ..... now doing business as a druggist and apothecary at No. .... Street—Avenue, in the city—town of ..... and this certificate applies only and is issued only in connection with the certificate of registration in pharmacy, form No. .... and bearing the name of the above said ..... and at said location. Provided, however, that if any statement made in the application aforesaid is not true, or if there are any material misrepresentations of conditions or facts, this certificate shall not be valid, and in any event will expire May 1, 189 .....

..... President.  
..... Secretary.

(No. 3.)

To the Board of Registration in Pharmacy: Knowing, or the records showing, that the within-named ..... has paid a tax upon a stock of drugs, medicines, chemicals or poisons valued at five hundred dollars or more, in this city—town of ..... during the past year, or admits the liability to such tax for the ensuing year, and knowing or believing his statements are true, I indorse his application. .... Treasurer.

Date, ..... Certificate granted—to be investigated—rejected.

Seth A. Emery, Northboro, has made an assignment.

At the meeting of the Massachusetts College of Pharmacy for the election of trustees Max Cramer and W. D. Wheeler were re-elected for a term of five years, and P. R. Crocker, the new member of the board, was elected for a similar term. The trustees meeting held subsequently for the election of officers resulted in the re-election of the corps which has served for the last two years.

### Good Display.

We call the attention of our readers to the advertising of Humphreys' Specifics, the style of which is admirable, and has increased the sales of these good sellers. We advise dealers to keep up their stock of Humphreys' Specifics, for they are among the few medicines that are not affected by the hard times. In fact, the demand is greater, for the people know that they are economical; saving time, money, and suffering.

### A Death's Head Bottle.

C. H. Lee & Co. of Jamaica Plain, report a very active and rapidly increasing demand for the Lee Poison Bottle, illustrated herewith. The bottle requires no label to inform anyone of the poisonous



nature of its contents, and this advantage is being very widely and thoroughly appreciated. For full description and prices of the bottles address C. H. Lee & Co., Jamaica Plain, Boston, Mass., mentioning this journal.

### Bromo-Caffeine Case Decided.

The Court of Appeals has reversed the decision of the General Term, in the matter of Keasbey & Mattison's suit against the Brooklyn Chemical Works, and ordered the decision of Judge Miles Beach, in Supreme Court, Special Term, May, 1892, to be affirmed and reinstated. This disposes of the "Bromo-Caffeine case" and thoroughly establishes the legality of "Bromo-Caffeine" as a valid trademark. A review of the case was published by the PHARMACEUTICAL RECORD, under the date of June 23, 1892, just two years ago, which covers the exact facts to-day as the case has been disposed of by the Court of Appeals.

Other infringing "Bromos" have been allowed to rest pending the final result of the suit, but will now be enjoined from sale and an accounting asked for by Messrs. Keasbey & Mattison's attorneys, Messrs. Jones & Govin, of this city.

### For Mothers.

The teething period of children is the first and most important action during infantile life, embracing the period from the fifth month to the third year of childhood. From the commencement to the close of this period the entire infant organization is undergoing a vast change, and many serious maladies arise during its progress; the salivary glands are brought into play, as is indicated by the increased flow of saliva. The infant endeavors to draw attention to its sufferings, and puts every object within its reach into its mouth. If the child be healthy and strong, teething often proceeds favorably. In weak and delicate children, on the other hand, the tooth penetrates the gum with difficulty, the infant becomes feverish and restless, and the most serious consequences may ensue. There is often intense pain accompanied by swelling of the gums; the digestive organs become deranged, and the bowels disordered, inflammation of the brain accompanied by convulsions follows, terminating but too frequently in a painful death.

Various remedies have been recommended to relieve the pain during this trying period, and the latest is the electro-motive necklace invented by Henry C. Blair, Philadelphia, who will quote special introductory prices to all who write him, mentioning this journal.

### A Wreck on the Fall River Line.

The Steamer Plymouth of the Fall River Line ran on a rock when leaving the Newport, R. I., harbor about 9 30 P. M. on June 18th. The passengers were landed at Newport by a small ferryboat about midnight. The ferryboat had to make a number of trips to get them ashore. They were all crowded into one special train, which had only one sleeping car attached and which left at 4 A. M. for New York, not reaching this city until about 9.20. The passengers were loud in their condemnation of the management of the line, some saying that the journey on the crowded train was a perfect nightmare.

The train was said not even to have a sufficient supply of drinking water on board. When the boat first struck, some of the waiters contributed toward a small-sized panic. The spot where the Plymouth struck is a dangerous one, as the ferryboat Connecticut went aground there, as did also the City of Fall River in 1891.

### Trikresol Soap.

Trikresol contains the ortho, meta and para Cresol in a pure state, and is of uniform (100 per cent.) strength. It is a colorless liquid, having three times the disinfectant value of carbolic acid, while being less poisonous and less caustic. For these reasons Trikresol Soap containing 5 per cent. of trikresol forms an excellent antiseptic cleansing agent, and is especially adapted for the disinfection of the surgeon's and general practitioner's hands. In the operating room, in clinics and in the office where gynecological, venereal and other cases are treated, it is most useful; in diseases of the skin, such as chronic indurated eczema, psoriasis, ringworm and parasitic skin diseases generally, it will be found of great value.

### Portable Lemonade.

The Ideal lemonade tablets recently placed on the market by Billings, Clapp & Co., present a most convenient method of preparing as wanted an ideal lemonade. The tablets have many excellent qualities, such as portability, permanence, and solubility, but their most valuable feature is the excellence of the lemonade made from them, which is as near like that made from selected whole fruit as it seems possible for anything else than the whole fruit itself to produce, while the presence of carbonic acid gas in the lemonade made from the tablets gives it even an advantage over that made from the fruit itself. Write them for sample mentioning this paper.

Before buying thermometers, hypodermic needles and outfits, electric batteries etc., send to H. Weinhausen, 22 and 24 North William street, New York, for a copy of his illustrated price list of these goods. It will pay you.

Stecher's "Stick 'Em" fly paper is one of the oldest, largest and best brands of fly paper made. If your wholesale house does not keep it send your order direct to Henry Stecher, Cleveland, O. There is profit in handling this particular brand.

If you put up your own make of tooth powder or tooth wash you must use Wirz bottle stoppers. These are designed for cork and screw neck liquid and powder bottles. The new style caps permit of the liquid or powder being applied without removing the cap. Any of Wirz's specialties, such as collapsible tubes, pill machines, and suppository molds may be ordered through any wholesale druggist, as every dealer keeps them.

It is well to specify the make when ordering fruit juices. Druggists who have once used "Tarrant's pure fruit juices" invariably stick to this make. Tarrant & Co. have an interesting announcement in this issue regarding their various fruit juices and syrups for the soda fountain, which should be read by every one who cares to cultivate a profitable soda syrup business. By addressing Tarrant & Co., corner Greenwich and Warren streets, New York, you can obtain a complete list of soda water requisites for the present season.

### Review of the Wholesale Market.

NEW YORK, June 27, 1894.

*It should be understood that the prices quoted in this report are strictly those current in the wholesale market, and that higher prices are paid for retail lots. The quality of goods frequently necessitates a wide range of prices.*

The market opens dull and lifeless, and so far as the package trade is concerned there has been very little deviation from this condition during the week under review. In a jobbing way, however, there has been some slight improvement though the improvement is rather in the number of orders received than in their size, which latter continues very small, such changes as have occurred have not been sufficiently startling to arouse any general interest.

#### ADVANCED.

Caffeine.  
Mexican sarsaparilla.

#### DECLINED.

Castor fiber.  
Mexican saffron.  
Bleaching powder.  
Bichromate of potash.  
Blue vitriol.  
Cream tartar powder.  
Gum camphor.  
Celery seed.  
Caraway seed.

The opium market in this center has been almost entirely devoid of any movement so far as reported; no cables have come to hand, and if any information has been received it has not been given out nor has it caused any apparent change in the status of the market. *The Chemist and Druggist*, Smyrna cable, dated June 13, reads as follows: "Speculators have again appeared in the market, and are buying freely at rising prices. For current quality manufacturing opium the equivalent of 8s. 8d. per lb. f.o.b. has been paid." This marks a rise of 3d. per lb. upon the last selling figure. The fact that this has not apparently affected our market here is probably due to the large stocks held in the United States. For jobbing quantities \$2.15 @ \$2.20 is wanted, while for cases \$2.10 @ 2.15 would be accepted.

ALCOHOL is quiet and unchanged at \$2.18 @ \$2.22 with the usual rebate, the situation is rather interesting however, in view of an early promise of the settlement of the Tariff question.

ALCOHOL, WOOD.—The competition between the trust and independent distillers continues as strong as ever, with the price quoted at 70c. for 95 per cent. and 75c. for 97 per cent.

BALSAM.—The market is quiet and unchanged. For copalba, 35 @ 36c. is wanted for average essential American balsam. Tolu is reported quiet at 24c.

BEANS.—The stock of Angostura Tonka beans is said to be very small. Sales are reported of a few small lots on private terms, and some of the new crop beans which have made their appearance have been somewhat criticised. The price is unchanged at \$2. @ \$2.20. Vanilla beans are very quiet at the moment, the new crop which is now due is coming in very slowly and has so far not been received in sufficient quantities to unsettle the prices. Bismuth preparations show no further change since our last, but in view of the keen competition since the breaking up of the Trust jobbers seem averse to taking any large quantity preferring to await developments.

BERRIES, Juniper sell fairly well, the price being steady at 2½ @ 3c.

CASTOR OIL has declined to \$14. at which figure some offered during the week.

CACAO BUTTER is quiet and the market is easy in its tone, foreign bulk being quoted at 31½ @ 32c. Caffeine is in scant supply and for the stock on the spot \$2.75 @ \$2.85 is asked.

CUTTLE BONE has been attracting some attention during the week, as the sharp competition has lowered the price to a figure which is sufficient to tempt buyers to lay in stocks for their future needs. Numerous sales are reported of Trieste Bone at 8½ @ 8¾c.

FLOWERS, new crop German chamomile near by are offering for 20c.

GUARANA, small sales are reported at 90c., but no general interest is manifested.

LYCOPodium is quiet but firm at 53 @ 56c. The interest in the drug is noticeably less since it is now too late for the firework season.

COD LIVER OIL.—The market is steady at \$25 @ \$28 with a fair consumptive demand reported. In some quarters the conditions are thought to be favorable for an advance but for the competition between two of the foremost American dealers.

ERGOT, German, has been offered at very low prices though it is reported that some of the cheapest of the offerings were very old inferior goods; 22c. was wanted for new German and 23 @ 25c. for Spanish of good quality.

MENTHOL.—The stocks are small and held firmly at \$5.50 @ \$5.75.

SAFFRON, Mexican, is dull and unsettled; on the spot 25c. is asked but for future delivery it is reported that 20c. would be accepted.

SOAP.—Conti's is offered on the spot at 9½c. For goods in transit, however, an advance is wanted in view of the proposed increase in the Tariff.

#### DYESTUFFS.

CUTCH is steady with a fair jobbing trade reported, and the market reported firm at 5½ @ 5¾ @ 6c.

DIVI DIVI has sold in a small way during the week at \$70 @ \$75. The supply is limited and held firmly.

GAMBIER is quiet and the interest in it is in abeyance. Supplies ex-steamer may be obtained at 3¾c., or ex-store at 4 @ 4¼c.

NUTGALLS are low, with 13 @ 14c. wanted for Blue Aleppo, and 10½ @ 11c. asked for China.

SUMAC, Sicily, continues steady but quiet at \$67.50 @ \$70. For Virginia \$47.50 @ \$49 is wanted, though no transactions are reported of any consequence.

#### CHEMICALS.

ACETATE OF LIME sells rather well for forward delivery, the supplies for this month being all in hand. Brown is quoted at 90 @ 95., and grey \$1.60 @ \$1.65.

ARSENIC, White, has been sold as low as 3½c. during the week, though the general quotation is 3¾ @ 3½c.

BLEACHING POWDER is easier, there being offers for forward delivery on the market at \$2 @ \$2.15, while English for July shipment are said to be obtainable at \$1.75.

BICROMATE OF POTASH offers at 9 @ 9½c. though the market has a firmer tone and there are some indications that the old range of prices will be regained.

BLUE VITROL is becoming rather more plentiful and an easier tone has developed in consequence with 3¾ @ 6¾c. quoted as the asking price, though it is intimated that this might be further shaded.

CHLORATE OF POTASH is dull with the nominal quotation of 13½c. for German and 13¼c. for English either powdered or crystal.

CITRIC ACID is reported weaker but there has been no positive break, manufacturers still asking 40½c. for bbls. and 41c. for kegs.

CREAM TARTAR, powdered, has declined in some quarters to 17½c., but the concession has not resulted in any large business.

NITRATE OF SODA has improved in tone, and after a sale of some 4,000 bags the price has advanced to \$2.25 for spot, to arrive; \$2.17½ @ \$2.20 would be accepted, while forward shipments can be had at \$1.92½ @ \$1.95.

QUICKSILVER is somewhat unsettled in view of the proposition to put this metal on the free list, though there has been no active change in the quotation.

#### ESSENTIAL OILS.

Very little business is doing in the line of essential oils at large.

ANISE is strong in tone and the price firm at \$1.50 @ \$1.55, which is really below the equivalent for the cost of importation.

BERGAMOT.—No further change has occurred since the reduction of Sanderson's to \$2, which was noted in our last issue. The distribution is limited.

CLOVE is very firm in sympathy with the parent drug, at 62½.

PEPPERMINT is very dull, the low range of prices in Europe having the effect of checking the sales here. There has been some inquiry for bulk from abroad and a few sales are reported at \$2.30 @ \$2.60, but the difference in prices between buyer and seller prevents any large business.

#### GUMS.

CAMPHOR has been reduced by domestic manufacturers to 37c. in bbls. and 38c. in cases. For Japanese 38 @ 39c. is asked. It is because of the keen competition from the Japanese camphor that the domestic refiners have found it necessary to reduce their prices.

ARABIC sorts are in good demand for the arts, though of prime picked goods we do not notice many large sales.

CHICLE is quiet at 25 @ 26c.

SHELLAC is very dull, though there does not seem to be any disposition shown to realize by making a sacrifice.

TRAGACANTH moves in a jobbing way only at 26 @ 54c. for Aleppo, as to quality.

#### ROOTS.

GINGER, Jamaica, is in scant supply, and considerable inquiry is noted in the market. Unbleached is had at 15 @ 16c., and bleached at 12 @ 14c.

GOLDEN SEAL is rather firmer, and 20c. is now quoted as an inside figure.

JALAP is dull and selling at 19 @ 20c., both for jobbing and invoice lots.

ORRIS ROOT, Verona, is firm at 14½c. for good quality, while for Florentine 20 @ 30c. is wanted.

RHATANY is in light supply, and 8 @ 9c. is asked for additional parcels, the last having been cleared out of the market at 7½c.

SARSAPARILLA, Mexican, is quoted at 9½c. by jobbers. No stocks are reported in first hands.

SQUILLS.—The market is easier, 3 @ 4c. being quoted according to quality. Reports indicate that the crop is large.

#### SEEDS.

ANISE is quiet but firm at 8½ @ 10c. for German.

CANARY SEED continues to gain in firmness, the price for Sicily being 3c., at which considerable sales have been made during the week. Smyrna is firm at 2½c. The advances from Smyrna indicates a rather scant crop.

CELERY has declined to 14½c. though even at this figure there are no takers at the present. The decline is looked upon as being merely temporary approaching the pending regular season.

CARAWAY has declined to 6½c. for Dutch. No business is reported in the seed.

#### PAINTS, OILS AND COLORS.

WHITE LEAD.—The prices for either dry or oil are almost nominal, as the demand is very light at present. Dry lead is quoted 4½c., lead in oil at 5c.

RED LEAD is quiet, there being no demand either for pigments or from glass makers. For single ton lots 5½c. net cash is quoted openly and as intimated in our last issue even this might be shaded.

LITHARD shares in the dullness of the other lead pigments. It may be quoted at 4¾ @ 5c. for the low grades and 5¾ @ 6c. for the high grades less the usual discount.

LINSEED OIL continues very dull at the recent advance though in view of the scarcity of seed and the small supply on hand, holders do not show any desire to press their goods on the market.











2 gal  
256+

